TRANSCRIPT OF PROCEEDINGS

THURSDAY, DECEMBER 17, 1998

MINE, SAFETY, AND HEALTH ADMINISTRATION

DIESEL PARTICULATE MATTER EXPOSURE OF UNDERGROUND COAL MINERS

Pages: 1 through 204

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DEPARTMENT OFLABOR

MINE, SAFETY, AND HEALTH ADMINISTRATION

DIESEL PARTICULATE MATTER EXPOSURE OF UNDERGROUND COAL MINERS

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1	P R O C E E D I N G S	
2		
3		
4	MR. THOMAS TOMB: Good morning. I'd	
5	like to start the public hearing for this	
6	proposal for diesel particulate in underground	
7	coal miners.	
8	My name is Thomas Tomb. I am the	
9	Chief, Dust Division Health and Safety	
10	Technology Center, located in Pittsburgh	
11	Pennsylvania. I will be the moderator of this	
12	public hearing on MSHA's proposed rule	
13	addressing diesel particulate exposure of	
14	underground coal miners.	
15	Personally, and on behalf of the	
16	Assistant Secretary J. Davitt McAteer, I would	
17	like to take this opportunity to express our	
18	appreciation for each of you for being here	
19	today and for your input. With me on the panel	
20	today are: Jon Kogut, from the Office of	
21	Program Evaluation and Information Resources;	
22	George Saseen, from the Approval and	

- 1 Environmental Assessment of Contaminant Control
- 2 Branch of the Dust Division; Sandra Wesdock,
- 3 from the Office of the Solicitor; William
- 4 McKinney, from the Mine, Safety and Health
- 5 Academy; Ronald Ford and Pamela King, from the
- 6 Office of Standards, Regulations and
- 7 Variances.
- 8 This hearing is being held in
- 9 accordance with Section 10 of the Federal, Mine
- 10 Safety and Health Act of 1977. As is the
- 11 practice of this Agency, formal rules of
- 12 evidence will not apply.
- We are making a verbatim transcript
- 14 of this hearing. It will be made an official
- 15 part of the rulemaking record. The hearing
- 16 transcript along with the all the comments that
- 17 MSHA has received today and the proposed rule
- 18 will be available for your review. If you want
- 19 to get a copy of the hearing transcript for
- 20 your own use, however, you must make your own
- 21 arrangements with the reporter.
- We value your comments. MSHA will

- 1 anyone, including those of you who do not
- 2 present an oral statement. You may submit
- 3 written comments to Pamela King or send them to
- 4 Carol Jones, Acting Director of Standards,
- 5 Regulations, and Variances, at the address that
- 6 has been listed in the hearing notice. We will
- 7 include them in the rulemaking record. If you
- 8 feel you need to modify your comments or wish
- 9 to submit additional comments following this
- 10 hearing, the record will stay open until
- 11 February 16, 1999. You are encouraged to
- 12 submit to MSHA a copy of your comments on
- 13 computer disk.
- 14 Your comments are essential in
- 15 helping MSHA develop the most appropriate rule
- 16 that fosters safety and health in our Nation's
- 17 mines. We appreciate your views on this
- 18 rulemaking and assure you that your comments
- 19 whether written or oral will be considered by
- 20 MSHA in finalizing this rule.
- In another rulemaking on October 29,
- 22 1998, we published a proposal to address diesel

23 particulate matter exposure of underground

- 1 metal and nonmetal miners. The comment period
- 2 for that proposed rule will close on February
- 3 26, 1999.
- 4 Hearings for the metal and nonmetal
- 5 proposal will be announced in a future of
- 6 Federal Register Notice. You may obtain copies
- 7 of that proposal by downloading it from MSHA's
- 8 website at WWW.MSHA.GOV or by calling the
- 9 Office of Standards, Regulations, and Variances
- 10 at 703-235-1910.
- 11 However, the scope of this hearing
- 12 today is limited to the April 9th, 1998,
- 13 proposed rule addressing diesel particulate
- 14 matter exposure of underground coal miners.
- 15 This hearing is the fourth of four public
- 16 hearings to be held on this proposed rule. The
- 17 first was held in Salt Lake City on November
- 18 17th, 1998; the second was held at Beckley,
- 19 West Virginia, at the Mine, Safety, and Health
- 20 Academy on November 19th, 1998; and the third
- 21 was held in Mt. Vernon, Illinois, on December
- 22 15th, 1998.

- 1 were published in the Federal Resister on
- 2 October 19th, and can also be obtained from
- 3 MSHA's website on the internet, and there are a
- 4 view copies here, if you would like to get them
- 5 today.
- 6 On April 9th, 1998, MSHA Published a
- 7 proposed rule that would reduce risks to
- 8 underground coal miners of serious hazards that
- 9 associated with exposure to high concentrations
- 10 of diesel particulate matter. Diesel
- 11 particulate matter is a very small particle in
- 12 diesel exhaust. Underground miners are exposed
- 13 to far higher concentrations of this fine
- 14 particulate than any other group of workers.
- The best available evidence indicates
- 16 that such high exposures put these miners at
- 17 excess risk of a variety of health effects,
- 18 including lung cancer.
- 19 The comment period for the proposed
- 20 rule is scheduled to close on August 7th, 1998.
- 21 However, due to requests from the mining
- 22 community, the agency extended the comment

10

- 1 October 9th, 1998.
- 2 The proposed rule would require the
- 3 following: Proposed paragraph 72.500 would
- 4 require the installation and maintenance of
- 5 high-efficiency particulate filters on the most
- 6 polluting types of diesel equipment in
- 7 underground coal mines. It would require the
- 8 beginning 18 months after the date that the
- 9 rule promulgated, any piece of permissible
- 10 diesel-powered equipment operated in an
- 11 underground coal mine must be equipped with a
- 12 system capable of removing, on average, at
- 13 least 95 percent of the mass of DPM emitted
- 14 from the engine.
- 15 Additionally, 30 months after the
- 16 rule promulgated, any nonpermissible piece of
- 17 heavy duty -- and I stress heavy duty -- piece
- 18 of diesel-powered equipment operated in
- 19 underground coal mine be equipped with a system
- of removing, on average, 95 percent of the mass
- 21 of the diesel particulate matter emitted from
- 22 the engine.

- 1 installed to reduce the emission of DPM would
- 2 be required to be maintained in accordance with
- 3 manufacture specifications.
- 4 The proposal also sets forth the
- 5 Agency's Requirements for determining whether a
- 6 system is capable of removing, on average, at
- 7 least 95 percent of diesel particulate matter
- 8 by mass. It states that a filtration system
- 9 must be tested by comparing the results of the
- 10 emission tests of an engine with and without
- 11 the filtration system in place.
- 12 Proposed paragraph 72.510 is a
- 13 training requirement, which list the pertinent
- 14 areas in which construction must occur. The
- 15 training is to provide annually in all mines
- 16 using diesel-powered equipment, and is to be
- 17 provided without charge to the miner. It also
- 18 provides provisions on record retention,
- 19 access, and transfer.
- 20 And finally, proposed amendment to
- 21 paragraph 75.371 would amend existing paragraph
- 22 75.371, which is the mine ventilation plain

- 1 underground mine's ventilation control plan.
- 2 The additional information is limited, but is
- 3 critical to the control of diesel particulate
- 4 matter.
- 5 The proposal would require the
- 6 ventilation plan to contain a list of
- 7 diesel-powered units used by the mine operator
- 8 together with information about each unit's
- 9 emissions control or filtration system.
- 10 Details relative to the efficiency of the
- 11 system and the method used to establish the
- 12 efficiency of the system for removing DPM must
- 13 be included. Any amendments to a mine's
- 14 ventilation plan must, of course, also follow
- 15 the Requirements of 30 CFR 75.370, which is the
- 16 mine's ventilation plan; Submission and
- 17 Approval Requirements.
- 18 MSHA received comments from various
- 19 sectors of the mining community in the
- 20 preliminarily reviewed the comments it has
- 21 received thus far. MSHA would particularly
- 22 like additional input from the mining community

23 regarding specific alternative approaches

- 1 discussed in the economic feasibility section
- 2 of the preamble. As you might recall, the
- 3 options discussed include: establishing a
- 4 concentration limit for DPM in the sector,
- 5 requiring filters on some light-duty equipment,
- 6 and looking at the filter and the engine as a
- 7 package that has to meet a particular emission
- 8 standard instead of requiring that all engines
- 9 be equipped with high-efficiency filter.
- 10 The Agency is also interested in
- 11 obtaining as many examples as possible of the
- 12 specific situation in individual mines. This
- 13 could include the composition of the diesel
- 14 fleet, what controls cannot be utilized to
- 15 special conditions, and any studies of
- 16 alternative controls you might have used for
- 17 the computer spreadsheet.
- 18 We also seek information about the
- 19 availability and cost of various control
- 20 technologies that are being developed; for
- 21 example, high-efficiency ceramic filters; also
- 22 experience with the use of available control

- 1 alternative approaches for underground coal
- 2 mines. We would also like to hear about any
- 3 unusual situations that might warrant the
- 4 application of special provisions.
- 5 The Agency welcomes comments upon any
- 6 topics on which we should provide initial
- 7 guidance, as well as any alternative practices
- 8 which MSHA should accept for compliance before
- 9 various provisions of the rule go into effect.
- 10 Additionally, the National
- 11 Environmental Policy Act of 1969 requires each
- 12 Federal Agency to consider the environmental
- 13 effects of proposed actions and to prepare an
- 14 environmental impact statement on major actions
- 15 significantly affecting the quality of the
- 16 human environment.
- 17 On July 14th, 1998, MSHA published a
- 18 notice in the Federal Register that announced
- 19 its preliminary determination for the proposed
- 20 rule would have no significant environmental
- 21 impact. The comment period was scheduled to
- 22 close on August 10th, 1998, however, MSHA

23 extended that comment period until October 9th,

- 1 1998. The record will remain open, as stated
- 2 in the Public Hearing Notice, until February
- 3 16th, 1999, to allow for post-hearing comments
- 4 in date of submission.
- 5 MSHA reviews this rulemaking activity
- 6 as extremely important and knows that your
- 7 participation is also a reflection of the
- 8 importance you associate with this rulemaking.
- 9 To insure that an adequate record is made
- 10 during this proceeding when you present your
- 11 oral statement, or otherwise address the panel,
- 12 I ask that you come to the podium and clearly
- 13 state your name, spell your name, and state the
- 14 name and the organization that you represent.
- 15 It is my intent that during this
- 16 hearing, anyone who wishes to speak will be
- 17 given an opportunity. Anyone who has not
- 18 previously asked for time to speak needs to
- 19 tell us of their intention to do so by signing
- 20 the Request to Speak Sheet and let us know how
- 21 much time you will need to make your
- 22 presentation. I have the sheet up here, so at

23 the break if anybody that has not signed the

16

- 1 sheet wants to come up and sign it, they can do
- 2 that when we take for break or at lunch time.
- We are scheduled to go until 5:00
- 4 p.m. today. Of course, if the presentation
- 5 don't go that long, then we'll abandon the
- 6 hearing earlier.
- 7 Our attempt to recognize all speakers
- 8 in the order in which they request to speak.
- 9 As the moderator, if necessary, I reserve the
- 10 right to modify the order in presentation in
- 11 the interest of fairness. I doubt that it will
- 12 be necessary, but I may also exercise
- 13 discretion to exclude irrelevant or unduly
- 14 repetitious material. In an order to clarify
- 15 certain points, the panel may ask questions of
- 16 the speakers.
- To begin for the first speaker, we
- 18 will have Mr. Glenn Pierson:
- 19 MR. GLENN PIERSON: I'm Glenn
- 20 Pierson, G-l-e-n-n P-i-e-r-s-o-n. I am a
- 21 member of the United Mine Workers and I work at
- 22 Local 1928.

17

1 similar hearings in Beckley, West Virginia. At

- 2 that time a gentlemen by the name of Norbert
- 3 Paas had a dry-filtration system that -- in the
- 4 neighborhood of 98 percent particulate that
- 5 would filter out. About four years have past
- 6 now, and we haven't seen any improvements in
- 7 our filtration systems. We have got more
- 8 equipment in the mines. We've got people
- 9 exposed to combinations of things that could
- 10 cause breathing problems: coal dust, silica,
- 11 and the diesel particulate. Your own tests and
- 12 studies have shown that 900 out of 1,000 people
- 13 that are exposed to these diesel particulates
- 14 could possibly come down with lung cancer.
- The Pennsylvania State Laws have
- 16 chosen to protect their miners and go a little
- 17 bit further than what MSHA has done in the
- 18 past. And I think it's MSHA's moral obligation
- 19 to give the miners across the country the equal
- 20 protection that those Pennsylvania miners have.
- 21 Thank you.
- 22 MR. THOMAS TOMB: Okay. Wait a

23 minute, please. I have some questions here.

- 1 MR. GLENN PIERSON: Yes, sir.
- 2 MR. THOMAS TOMB: Any questions of
- 3 him?
- 4 MR. GEORGE SASEEN: Sir, did you say
- 5 -- does your mine have any Norbert Paas'
- 6 dry-filtration systems?
- 7 MR. GLENN PIERSON: No, sir.
- 8 MR. GEORGE SASEEN: Okay, are you
- 9 using any phasetology (phonetic) equipment?
- 10 MR. GLENN PIERSON: Yes, sir.
- MR. GEORGE SASEEN: What type? Are
- 12 they with wet scrubbers?
- 13 MR. GLEEN PIERSON: Yes, sir.
- MR. GEORGE SASEEN: Could you provide
- 15 us with an inventory of that equipment at your
- 16 mine?
- 17 MR. GLENN PIERSON: Particular
- 18 numbers?
- 19 MR. GEORGE SASEEN: Numbers and types
- 20 of equipment.
- 21 MR. GLENN PIERSON: Numbers, no, sir.
- 22 I could provide you with types. We've got a

23 diesel Ramcar, it's a Jeffrey, and we've got --

- 1 let's see, I think we've got some Eimcos, and
- 2 -- what's the name of that other? Wagner. I'm
- 3 sorry. As far as face equipment.
- 4 MR. GEORGE SASEEN: As far as face
- 5 equipment you --
- 6 MR. GLENN PIERSON: Yes, sir. We've
- 7 got diesel locomotives that run on a track
- 8 which is in our main intake.
- 9 MR. GEORGE SASEEN: If you could
- 10 provide that list, also if you could present us
- 11 with information on the usage and how much
- they're used per days each piece of equipment,
- 13 an hour, two hours, if that's possible.
- 14 MR. GLENN PIERSON: The majority of
- 15 it is run the majority of the shift.
- MR. GEORGE SASEEN: Well, if you
- 17 could specify that, please.
- 18 MR. GLENN PIERSON: I can't at this
- 19 time.
- MR. GEORGE SASEEN: Well, I mean in
- 21 written form, if you would like to submit that
- 22 before the February 16 deadline.

20

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1 MR. GEORGE SASEEN: Thank you.
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- 2 MR. GLENN PIERSON: Thank you.
- 3 MR. THOMAS TOMB: I have one
- 4 question also --
- 5 MR. GLENN PIERSON: Yes, sir.
- 6 MR. THOMAS TOMB: -- just to
- 7 clarify. My understanding from what you said
- 8 to Mr. Saseen, you only have water scrubbers as
- 9 control system.
- 10 MR. GLENN PIERSON: On the face
- 11 equipment.
- MR. THOMAS TOMB: Is there any other
- 13 control technology used for diesel particulate
- in your mine that you know of?
- MR. GLENN PIERSON: We have a dry-
- 16 filter system, but not on the face equipment.
- 17 It's just a regular filter.
- 18 MR. THOMAS TOMB: Paper filter?
- 19 MR. GLENN PIERSON: Yes, sir.
- 20 MR. THOMAS TOMB: How many pieces of
- 21 equipment are equipped with that?
- MR. GLENN PIERSON: It's mostly the

23 diesel locomotives and probably half a dozen or

- 1 so.
- 2 MR. THOMAS TOMB: Thank you.
- MR. GLENN PIERSON: Thank you.
- 4 MR. THOMAS TOMB: Our next presenter
- 5 will be Mr. Woods:
- 6 MR. JAMES WOODS: Good morning.
- 7 James Woods, J-a-m-e-s W-o-o-d-s, UMWA local
- 8 1928.
- 9 I, like Glenn, have been to several
- 10 of diesel hearings that MSHA has held across
- 11 the country in the 90s. We lobbied for diesel
- 12 regs; MSHA did give us a few regs that helped
- 13 miners over the country.
- As far as the proposed rule, MSHA's
- 15 preamble to the proposed rule indicates that a
- 16 total of 3,000 pieces of equipment, diesel
- 17 equipment, operates in underground coal mines
- 18 today. Out of those 3,000 pieces of diesel
- 19 equipment, approximately 500 pieces are in-by
- 20 equipment, approximately 500 pieces are labeled
- 21 as heavy duty.
- This leaves a total of 2,000 pieces

- 1 excuse me -- not -- excuse me -- that's not
- 2 considered in the rule. This means that people
- 3 like myself will be exposed to diesel
- 4 particulate matter of approximately 2,000
- 5 pieces of equipment, if this equipment is
- 6 permitted to operate without filters.
- 7 This is like the Government's attempt
- 8 to limit harmful and dangerous emissions in the
- 9 air. The only difference is we can't buy
- 10 emission credits. The only thing you're
- 11 allowing them to do is change the light duty,
- 12 heavy duty, or inby on the machines. If this
- 13 rule is adopted as proposed by MSHA, then that
- 14 means we will have approximately 2,000 pieces
- 15 of equipment in the country today that's
- 16 labeled light duty, that wouldn't need any kind
- 17 of filtration on them at all.
- One of our fears, and there are many,
- 19 is that exposure to diesel exhaust will lead to
- 20 the next black-lung epidemic. We've been
- 21 working in Alabama for the last 25 years with
- 22 diesel-powered equipment. We've been asking

- 1 help us out, to give our people some way that
- 2 we can live with underground diesel-powered
- 3 equipment.
- 4 Twenty-five years later, here we are
- 5 proposing a proposed rule that's only going to
- 6 address, as I mentioned before, 1,000 pieces of
- 7 equipment out of approximately 3,000 pieces,
- 8 and that's to date, and they're still adding
- 9 up.
- 10 I work for Jim Walter Number 3
- 11 Mines. At Jim Walter Number 3 Mine, there are
- 12 approximately 30 pieces of what MSHA would call
- 13 light-duty equipment in underground coal mine.
- 14 Excuse me. Some of your own test an analysis
- of underground coal mines that have diesel-
- 16 powered equipment have -- the analysis prove
- 17 that when exposed to just half of the dose
- 18 that's actually found that the mine air, some
- 19 studies go as far as showing 900 out of 1,000
- 20 coal mines in a health risk.
- In 1996, UMW, AMAX (phonetic) Coal
- 22 Company, the Coal Association, and the Bureau

23 of Deep Mine Safety, along with several other

24

- 1 people, reached an agreement on regulation for
- 2 the use of diesel-powered equipment in
- 3 Pennsylvania.
- 4 The question to the Panel I have: If
- 5 Pennsylvania can adopt regulations that the
- 6 majority of the people agree protects coal
- 7 miners, reduces their risk of diesel emission,
- 8 why can't Alabama and the rest of the country?
- 9 MR. THOMAS TOMB: Thank you very
- 10 much. State your name for the reporter.
- 11 MR. RONALD FORD: My name is Ronald
- 12 Ford. Mr. Woods --
- MR. JAMES WOODS: Uh-huh (yes).
- MR. RONALD FORD: -- at the Jim
- 15 Walter Number 3 Mine, you said you had 30
- 16 pieces of light-duty equipment. Do you know
- 17 about the total number of diesel pieces that
- 18 you have?
- 19 MR. JAMES WOODS: The total number of
- 20 -- as MSHA propose as light duty.
- 21 MR. RONALD FORD: No. Total --
- MR. JAMES WOODS: The total number of

23 diesel-powered equipment that's on the ground?

- 1 MR. RONALD FORD: Yes.
- 2 MR. JAMES WOODS: No, sir, I don't
- 3 have a total number of that, but there are
- 4 many. We operate solely on the diesel-powered
- 5 equipment for coal hauling, track hauling.
- 6 MR. RONALD FORD: Can you give us
- 7 some examples of how this light-duty equipment,
- 8 these 30 pieces, present problems to the miners
- 9 in the mine? What type of equipment this is
- 10 and what are the problems that you're facing
- 11 with it?
- MR. JAMES WOODS: Sure.
- 13 Approximately, at Number 3 -- and I can only
- 14 speak for Number 3 -- approximately 25 pieces
- 15 are manbuggies, manhaulers. We have Low Tracs,
- 16 what we call Low Tracs -- in the industry, I
- don't know what they call them, but they're Low
- 18 Tracs, something like forklifts, where you
- 19 unload material with.
- 20 Also Number 3 Mine is on the 1105 and
- 21 the 326 Petition that allows better intake
- 22 air. Our primary intake is traffic, where all

23 the diesel equipment runs; that intake runs

- 1 directly into the face. You've got some
- 2 sections with as many as four diesel ramcars on
- 3 them, running at all times, as my brother
- 4 stated. Along with the intake air -- and these
- 5 diesel emissions from the manbuses, any piece
- 6 of equipment that MSHA has labeled outby or
- 7 light duty, those emissions come directly to
- 8 the face area. If that answers your question.
- 9 MR. RONALD FORD: So, some of the
- 10 light-duty equipment is not transporting rock
- 11 or coal, but it may be transporting equipment
- 12 that is very heavy, therefore, is under heavy
- 13 load.
- 14 MR. JAMES WOODS: Well, I think those
- would be motors that I would guess would follow
- 16 under the heavy-duty definition that MSHA has
- 17 prescribed as.
- 18 MR. RONALD FORD: Thank you.
- MR. BOB HANEY: Bob Haney. Mr.
- 20 Woods, the previous speaker said that you have
- 21 several pieces of equipment with dry-filtration
- 22 systems at your mine.

- 1 MR. BOB HANEY: Do you know how long
- 2 the filters last on those systems before they
- 3 have to be changed?
- 4 MR. JAMES WOODS: No, I don't. No, I
- 5 don't. I would hate to try to speculate on
- 6 that, because I'm not in that particular frame
- 7 of checking that, but -- I couldn't say.
- 8 MR. THOMAS TOMB: Thomas Tomb. I
- 9 have a couple of questions. On your
- 10 manbuggies, you said you have 25 of them that
- 11 operate.
- MR. JAMES WOODS: Approximately, 25
- manbuses.
- MR. THOMAS TOMB: How are they used?
- 15 Are they running most of the time? During a
- 16 shift? Do they run two hours out of a shift?
- 17 Or do you have any kind of an estimation on
- 18 that?
- 19 MR. JAMES WOODS: It's -- it's pretty
- 20 much hard to say. They run -- they're
- 21 manhaulers, they haul the crews into the
- 22 section, but also they are used to bring

- 1 section track, pushing cars in to the end of
- 2 the track to be unloaded. I think they are
- 3 rated at something like a five ton locomotive.
- 4 So, in the definition in the proposed rule, you
- 5 could use those, as prescribed, as light duty
- 6 to push heavy loads, and they wouldn't have to
- 7 come under the proposed rule.
- 8 MR. THOMAS TOMB: Do they get used a
- 9 lot during the shift?
- 10 MR. JAMES WOODS: Sure.
- 11 MR. THOMAS TOMB: All of them are
- 12 running.
- 13 MR. JAMES WOODS: Now, all of them
- 14 do. Not run at the same time. You probably
- 15 wouldn't have that, but you have a significant
- 16 amount of equipment on the track all during the
- 17 8-hour period. Sure.
- MR. THOMAS TOMB: Do you have any
- 19 knowledge of the maintenance program of the
- 20 equipment on your mines? Is there a regular
- 21 maintenance program performed on it?
- MR. JAMES WOODS: We do have a

23 maintenance program, but I couldn't specify.

- 1 MR. THOMAS TOMB: Okay. Thank you
- 2 very much.
- 3 Our next presenter will be Mr.
- 4 Sawyer:
- 5 MR. WILLIAM SAWYER: William Sawyer,
- 6 S-a-w-y-e-r, Hacksaw.
- 7 MR. THOMAS TOMB: Pardon?
- 8 MR. WILLIAM SAWYER: Hacksaw is what
- 9 they call me. Everybody knows me by it.
- 10 MR. THOMAS TOMB: Okay.
- 11 MR. WILLIAM SAWYER: I have a few
- 12 questions, and I'm familiar with the two guys
- 13 that's already spoke here, because I worked in
- 14 their mines some. But I have questions and
- 15 then maybe a few comments. But one is the
- 16 concern for the diesel emissions particulate
- 17 that are in neutral entries where you have
- 18 outby equipment both heavy and light duty
- 19 running and there's little to no ventilation.
- 20 And, as our brothers from Jim Walter,
- 21 they have intake air or theirs. All right. On
- 22 our sections we go into, there's intake air on

- 1 that the vent regs on diesel will pick up
- 2 ventilation for any equipment coming in,
- 3 staying in prolonged period of time on the
- 4 sections, that's intake air.
- 5 But my question is: Have y'all
- 6 considered about neutral entries where your
- 7 belt and tractors are in adjacent entries and
- 8 they're not separated and they're running
- 9 pretty much continuously, heavy, which is our
- 10 motors pulling longhaul material, or, you know,
- 11 heavy stuff; add a little parts and jeeps --
- 12 and electricians use two jeeps, and such as
- 13 that.
- Okay. Back in the '90s, when they
- 15 were talking about those hearings, there was a
- 16 Dr. Cantrell that was doing test on diesel.
- 17 From what I understood then, and I still don't
- 18 get too many good answers about it -- coal dust
- 19 particles and diesel particulate have a
- 20 tendency to combine. All right. When you're
- 21 sampling, do y'all have an adequate means to
- 22 separate those two, because both of them is

- 1 them cause lung disease?
- 2 And in that same scenario, when
- 3 you're checking for that 95 percent free, and
- 4 that's what it's boiling down to, can you
- 5 separate them to see which is which?
- 6 Also -- oh, I left my glasses back
- 7 there. I can't read my own writing. We have
- 8 the wetbed-scrubber system on our ramcars. We
- 9 got into this -- we've had diesels probably
- 10 longer than my brothers here, except maybe
- 11 Number 3 -- and we have a paper filter plus --
- it's on the outby side of our wetbed scrubber.
- 13 They help. You know, it's obvious from the
- 14 man's reaction they help. But how, as me,
- 15 Hacksaw, a safety committeeman, know how much
- 16 particulate is being put out.
- You know, what tests are being used,
- 18 which we do our PPM test regular. We even went
- 19 into the PPM test on outby light and heavy,
- 20 we're doing it now, so we won't get caught in
- 21 November '99, not doing it. And we know what
- they're putting out, and we're observing the

- 1 threshold that's concerned to us, the company
- 2 changes them out. They do do maintenance on
- 3 them continually on the wetbed scrubber.
- 4 The filters, I'll tell you about the
- 5 filters, and our safety rep here knows a whole
- 6 lot more about them. But when we started off
- 7 with them, they guaranteed three shifts;
- 8 wouldn't do it. Then they said two shifts; a
- 9 little bit better, but not good enough. We've
- 10 even tried to recycle them; take them out,
- 11 clean them, bring them back in; no good. So,
- 12 now we change them each shift, each eight-hour
- 13 shift. And it does help.
- 14 But still how much particulate is
- 15 being out. We know what the manufactures told
- 16 us the filters would do theirself, and we know
- 17 the scrubbers, the wetbed scrubbers -- I
- 18 believe back then Jeff was at the meeting. I
- 19 believe when the wetbed scrubber comes off the
- 20 production line and it has totally been covered
- in maintenance, it is around a 90, 95 percent
- 22 particulate-free system, but it has to be

- 1 starts dropping.
- Okay. Back to the same question:
- 3 How do I know how much particulate is coming
- 4 out? What tests are available? What machines
- 5 or testing equipment? And I know Dr. Cantrell
- 6 was running tests on ramcar operators at that
- 7 particular time, and he was running it strictly
- 8 on them, and my question was: How about the
- 9 men that are on the face and the particulate
- 10 off these ramcars is covering the pin crew, the
- 11 scoop crew, and everybody, but they were
- 12 testing just operators, which run away from the
- 13 emissions part time. Now, under the new regs,
- 14 we take check point. At the loading point that
- 15 diesel is setting under a load, unloading, and
- 16 also on our return where everything on the
- 17 section is coming off. That's a little bit
- 18 better than it was back in the '90s.
- 19 This is just questions on the
- 20 particulate, and if y'all could enlighten me a
- 21 little bit, I'd thank you.
- MR. THOMAS TOMB: Okay. Thank you.

23 Any questions?

- 1 I'll just go ahead and address your
- 2 questions. I'm not sure I remember all of your
- 3 questions. I think the main pertinent question
- 4 was --
- 5 MR. WILLIAM SAWYER: The separation.
- 6 MR. THOMAS TOMB: The mix of coal
- 7 dust and diesel particulate I think was your
- 8 main question.
- 9 This rule that requires filters is
- 10 going to reduce the amount of diesel
- 11 particulate coming out. The test would be
- 12 performed in a laboratory setting. It wouldn't
- 13 be performed underground. So, the efficiency
- 14 that you get is going to remove the diesel
- 15 particulate.
- Now, for every residual diesel
- 17 particulate, the five percent that would still
- 18 be coming out, would still be mixed with the
- 19 coal dust in the environment, and it would be
- 20 sampled. As an example, if you did a
- 21 respirable dust sample for coal mine dust
- 22 exposure, you would get both -- that diesel

23 part would be included in your respirable dust

- 1 sample.
- 2 MR. WILLIAM SAWYER: That's what we
- 3 get now.
- 4 MR. THOMAS TOMB: Okay, yes, that's
- 5 right. So, I don't know if that really answers
- 6 your question. But you would be separating it
- 7 underground from what I thought you're question
- 8 was.
- 9 MR. WILLIAM SAWYER: It would
- 10 strictly be in the laboratory to separate and
- 11 determine which coal --
- MR. THOMAS TOMB: No separation.
- 13 It's just going to be how much is removed from
- 14 the exhaust. Okay? That's what it would be.
- MR. WILLIAM SAWYER: The second one
- is about the equipment; whether heavy outby or
- 17 light duty outby in neutral entries where there
- 18 is very little ventilation. You know, they're
- 19 running pretty consistent in there, and you do
- 20 have a buildup, even if you get the equipment
- 21 at it's best at 95 percent. They stay in these
- 22 areas for long periods of time, and is there

- 1 the ventilation. I know there's going to be to
- 2 improve the engines.
- 3 MR. THOMAS TOMB: That's addressed
- 4 in the diesel safety rule. And I believe those
- 5 regulations go into affect next year, requiring
- 6 specify ventilation.
- 7 MR. WILLIAM SAWYER: For the proposed
- 8 engine --
- 9 MR. THOMAS TOMB: For the engine,
- 10 yes, and it would cover the neutrals also.
- 11 Thank you very much for your comments
- 12 and questions.
- Our next presenter will be Mr. Caply:
- 14 Did I pronounce that correctly?
- MR. DENNY CAPLEY: Yes. My first is
- 16 Denny, D-e-n-n-y; second name is Capley,
- 17 C-a-p-l-e-y. I belong to local 2245, United
- 18 Mine Workers of America, Woodville, Alabama.
- I brought my glasses with me and now
- 20 I got to find them. I work at Jim Walter
- 21 Number 4 Mine underground.
- 22 My job is driving a diesel engine

- 1 exposed to hot disease exhaust fumes while
- 2 riding a mantrip from the bottom to section 3
- 3 in the west part of the mine. As a result of
- 4 my exposure to the hot diesel exhaust fumes, I
- 5 developed pneumonia and had a fever to reach
- 6 102.
- 7 Today a have a hacking cough on many
- 8 occasions, and approximately 18 months ago,
- 9 X-ray showed that I have a spot on one of my
- 10 lungs. And I got wrote here: Recent studies
- 11 have found that 900 out of 1,000 miners could
- 12 get lung cancer from diesel particulate
- 13 exposure.
- 14 I think it is essential that a
- 15 filtration system capable of removing, on the
- 16 average, of at least 95 percent of diesel
- 17 particulate matter by mass be phased in as soon
- 18 as possible on all underground diesel-powered
- 19 machines.
- Thank you.
- 21 MR. THOMAS TOMB: I'm trying to make
- 22 some notes here. Any questions.

1 ramcar have any filtration systems on it now?

- 2 MR. DENNY CAPLEY: Yes. But don't
- 3 forget, I was on a mantrip when this exposure
- 4 to the hot diesel exhaust fumes came -- I was
- 5 driving from the bottom going to our section.
- 6 I just want to make sure you understood.
- 7 MR. GEORGE SASEEN: Right. Your
- 8 ramcar has a wet scrubber system on it?
- 9 MR. DENNY CAPLEY: Yes.
- 10 MR. GEORGE SASEEN: And it has the
- 11 filter added on downstream; correct, the paper
- 12 filter?
- MR. DENNY CAPLEY: Don't have.
- MR. GEORGE SASEEN: I'm sorry.
- MR. DENNY CAPLEY: Don't have a
- 16 filter.
- 17 MR. GEORGE SASEEN: It does not have a
- 18 filter, a paper filter?
- 19 MR. DENNY CAPLEY: No.
- MR. GEORGE SASEEN: Okay. Thank you.
- MR. THOMAS TOMB: Mr. Caply, was
- 22 this exposure, was this like a one-time

- 1 month or?
- 2 MR. DENNY CAPLEY: This particular
- 3 time when I got -- overcome with these fumes,
- 4 it was later determined, I think, that there
- 5 was a leak in the exhaust system. So, it was a
- 6 one time --
- 7 MR. THOMAS TOMB: Exposure that this
- 8 happened.
- 9 MR. DENNY CAPLEY: -- exposure and I
- 10 got sick on it.
- 11 MR. THOMAS TOMB: Do you know if, in
- 12 your mine, maintenance is performed on your
- 13 diesel equipment? Do they have a good
- 14 maintenance program?
- MR. DENNY CAPLEY: It's better now
- 16 than it has been, but there's still some room
- 17 for improvement.
- 18 MR. THOMAS TOMB: Any other
- 19 questions? Thank you very much. Excuse me for
- 20 taking some time to make some notes.
- 21 Our next presenter will be Mr.
- 22 Brackner:

- 1 J-i-m B-r-a-c-k-n-e-r. I'm a safety
- 2 committeemen of the United Mine Workers of
- 3 America, local 2405; employee at Jim Walter
- 4 Number 4 Mine.
- 5 We received our first piece of diesel
- 6 equipment in the mid-80s. Since then, we've --
- 7 well, currently we have 63 pieces of
- 8 underground diesel equipment. We have numerous
- 9 complaints from miners about the equipments
- 10 smoking excessively. You've already heard
- 11 we've had a member that's been overexposed to
- 12 diesel exhaust.
- According to MSHA's proposed rule,
- 14 over half of our equipment is going to be
- 15 covered. The proposed rule, to me, is good,
- 16 but it falls short of providing our miners with
- 17 protection they deserve.
- 18 We'd like to see the DPM filters on
- 19 all of the diesel equipment: heavy duty and
- 20 light duty. We don't, we don't want to have
- 21 anybody else have the same problems that Mr.
- 22 Capley has had, on these strong regulations.

1 testify that they can control DPM through the

- 2 use of ventilation. I can't see that
- 3 happening. We get citation upon citation now
- 4 where we don't have adequate ventilation
- 5 underground in our mine.
- 6 I'm afraid if we go to something like
- 7 that, that, you know, we will end up with
- 8 something similar to the respirable dust
- 9 sampler. That on days that the equipment is
- 10 to be sampled, those days will be different
- 11 from normal operating days, which is the way it
- is with a lot of respirable dust sample.
- The best protection for miners, to
- 14 us, would be for each and every piece of diesel
- 15 equipment underground to be filtered.
- 16 That's all.
- 17 MR. THOMAS TOMB: Any questions?
- 18 MR. BOB HANEY: Yes. How much
- 19 airflow do you typically have on a section?
- 20 MR. JIM BRACKNER: It varies;
- 21 anywhere from 30,000 to 60-70,000.
- MR. BOB HANEY: Okay. Thank you.

- 1 MR. JON KOGUT: I think you said that
- 2 you, as the safety committeeman, received
- 3 complaints of excessive smoke. Can you expand
- 4 on that a little bit and give me some idea how
- 5 frequently you receive complaints? And you're
- 6 talking about visible black smoke.
- 7 MR. JIM BRACKNER: Visible smoke,
- 8 yes.
- 9 MR. JOHN KOGUT: How often do you get
- 10 complaints like that?
- 11 MR. JIM BRACKNER: Very often. It's
- 12 nothing unusual to receive a complaint every
- 13 day of some piece of equipment smoking:
- 14 burning their eyes, causing cough, having sore
- 15 throat.
- MR. JON KOGUT: Do people normally
- 17 complain when there is any visible smoke or
- 18 just, in their opinion, when the smoke is
- 19 excessive -- you used the word "excessive"?
- 20 MR. JIM BRACKNER: Our people aren't
- 21 bad to complain about just any little bit of
- 22 smoke. You know, normally when they complain,

23 it's excessive.

- 1 MR. JON KOGUT: So, what, on the
- 2 average, how many complaints would you say you
- 3 get a week?
- 4 MR. JIM BRACKNER: Five or six.
- 5 MR. THOMAS TOMB: Do you have a
- 6 maintenance program for the equipment in your
- 7 mine?
- 8 MR. JIM BRACKNER: Yes, we do.
- 9 MR. THOMAS TOMB: Even after the
- 10 equipment is maintained, do you know whether
- 11 there is still black smoke?
- 12 MR. JIM BRACKNER: Yes, sir. As a
- 13 matter of fact, a lot of times after it's sent
- 14 outside for reworking, sent back underground,
- that's when we have our biggest problem.
- MR. THOMAS TOMB: Okay. How many
- 17 pieces of equipment in your mine currently are
- 18 filtered?
- 19 MR. JIM BRACKNER: Only on our
- 20 ramcars, which is about -- there's probably
- 21 roughly 28, 29 of those, I guess. No, there's
- 22 less than -- there's 18.

- 1 question, Bob?
- 2 MR. BOB HANEY: Yes. That 30 to
- 3 -70,000 CFM is that on each side of the
- 4 section, so you have between 60 and -140,000 on
- 5 section.
- 6 MR. JIM BRACKNER: Yes.
- 7 MR. BOB HANEY: How many ramcars do
- 8 you particularly run?
- 9 MR. JIM BRACKNER: Anywhere from two
- 10 to four.
- MR. BOB HANEY: And they're the --
- MR. JIM BRACKNER: Jeffrey.
- MR. BOB HANEY: Jeffrey 4110?
- MR. JIM BRACKNER: Yes, sir.
- MR. BOB HANEY: The last speaker said
- 16 you didn't have filters on your ramcars.
- 17 MR. JIM BRACKNER: We have a wet
- 18 scrubber.
- MR. BOB HANEY: Well, the wet
- 20 scrubber is all that you have.
- 21 MR. THOMAS TOMB: That's all you have
- 22 is just the wet scrubber?

1 MR. BOB HANEY: You don't have paper

- 2 filters on them?
- 3 MR. JIM BRACKNER: As far as I know
- 4 we don't.
- 5 MR. BOB HANEY: Okay. Thank you.
- 6 MR. JIM BRACKNER: While we're at it,
- 7 I'd like to ask a question also. Diesel
- 8 locomotives, would that be considered heavy
- 9 duty or light-duty equipment?
- MR. BOB HANEY: Is it pushing loads
- 11 of coal?
- MR. JIM BRACKNER: No. Long-haul
- 13 equipment.
- MR. THOMAS TOMB: Heavy duty.
- MR. JIM BRACKNER: Thank you.
- MR. THOMAS TOMB: One more question,
- 17 sir. Mr. Saseen.
- 18 MR. GEORGE SASEEN: Is your fleet of
- 19 diesel relatively older fleet or newer fleet or
- 20 mixed?
- 21 MR. JIM BRACKNER: It's mixed.
- MR. GEORGE SASEEN: Mixed?

- 1 MR. GEORGE SASEEN: The complaints
- 2 you get on the black smoke, smoke coming from
- 3 them, is that generally more in the ramcars or
- 4 your light-duty type of equipment?
- 5 MR. JIM BRACKNER: Mostly from the
- 6 manbuses and the Eimco diesel locomotive.
- 7 MR. GEORGE SASEEN: Do you know what
- 8 kind of mantrips those are? Automotive pick-up
- 9 trucks or are they like AL or ALE?
- 10 MR. JIM BRACKNER: They're rated the
- 11 5 ton locomotive, similar, I guess, to what Mr.
- 12 Woods has in his mine.
- 13 MR. GEORGE SASEEN: So, most of the
- 14 complaints are coming from the light duty?
- MR. JIM BRACKNER: Well, from the
- 16 Eimco diesel locomotive, which you said was
- 17 considered heavy duty also. That's where
- 18 probably we receive most of the complaints.
- MR. GEORGE SASEEN: Okay. Thank you.
- 20 MR. WILLIAM McKINNEY: One more
- 21 question, if you don't mind. William McKinney.
- 22 I assume from the comment about the

23 locomotives that you do have a longwall at your

- 1 mine?
- 2 MR. JIM BRACKNER: Yes, sir. Two of
- 3 them.
- 4 MR. WILLIAM McKINNEY: Do you see
- 5 more of a problem with the diesel equipment
- 6 when you're setting up along a longwall section
- 7 or when you're recovering a longwall section or
- 8 are those instances of a concern to y'all?
- 9 MR. JIM BRACKNER: Well, we see
- 10 problems on a regular basis. Our problems are
- 11 not confined to one time. The first time when
- 12 a longwall is being set up or removed, we have
- 13 problems with our equipment smoking regularly.
- MR. WILLIAM McKINNEY: Thank you.
- MR. THOMAS TOMB: If we have to call
- 16 you back more than seven times, we give you a
- 17 seat at the table.
- 18 Thank you very much for your
- 19 comments.
- 20 Our next presenter will be Mr. --
- 21 C-a-g --
- MR. JEFFREY DUNCAN: Cagle.

- 1 I'll let you spell it.
- 2 MR. DWIGHT CAGLE. Good morning.
- 3 My name Dwight Cagle, UMWA, local 2397, Jim
- 4 Walter Number 7. D-w-i-g-h-t C-a-g-l-e. I'm
- 5 also a safety member.
- 6 At our mine, we have 12 to 15
- 7 ramcars, Deutz MWM 916 engines in them. Also 8
- 8 to 10 of these cars are running around the
- 9 clock, six to seven days a week. We also have,
- 10 as far as the Low Trac that he was talking
- 11 about, we carry the Isuzu C242 cylinder 56
- 12 horsepower, they're outback, and they're
- 13 equipped with catalytic converters, which they
- 14 may take out some particulates, but they put
- out the black smoke, just like the ramcars do.
- Now, our ramcars are equipped with
- 17 the wet scrubber. Also in our mines we have
- 18 seven Brookville locomotives 413 Deutz engine,
- 19 2 Eimcos with Deutz engines; also we have one
- 20 diesel piner (phonetic), two diesel air
- 21 compressor.
- 22 And getting back to the longwall

- 1 six locomotives running around the clock all in
- 2 shifts in the same split of air. And this is
- 3 around the clock until the wall is set up. We
- 4 have a total of about 35 diesel pieces at our
- 5 mine.
- 6 Our evidence shows that the approval
- 7 plate on this equipment for the particulate is
- 8 4,000 SI -- and versus 1,500 for -- that's for
- 9 one motor. This is not even --
- 10 MR. THOMAS TOMB: Could you repeat,
- 11 please?
- MR. DWIGHT CAGLE: Sir?
- 13 MR. THOMAS TOMB: Could you just
- 14 repeat what you said?
- MR. DWIGHT CAGLE: The approval plate
- on these engines is 4,000, is proved at 4,000
- 17 CFM --
- 18 MR. THOMAS TOMB: Okay.
- 19 MR. DWIGHT CAGLE: Okay. And to get
- 20 the particulate --
- 21 MR. THOMAS TOMB: The particulate
- 22 index is --

- 1 that's a little over twice as much CFM on that.
- 2 And during these longwall move -- this don't
- 3 even count the manbuses and jeeps in the same
- 4 split of air. I have worked on these longwall
- 5 moves and a lot of our people has complained of
- 6 sever headaches, and you can taste the diesel
- 7 and the soot.
- Also in our mines when we get close
- 9 to running out of space for a wall, they turn
- 10 our section into two-barrel entries, which is
- 11 850 foot long to 1,000 foot long. And you're
- 12 talking about putting two and three ramcars
- 13 running 8-, 10-, 12-, 16-hour shifts. They put
- 14 out a lot of emissions.
- One car we had a lot of trouble with
- 16 in this two-barrel entry that, you know, we
- 17 have a pretty good maintenance program on ours;
- 18 we change our filters weekly, air filters and
- 19 all, we do CO test, but I look through our
- 20 record books where we register this, and either
- 21 our record keeping is not good or we are
- 22 falling back on our checking, may be it's

23 because we only have one CO checker, and most

- 1 of the time the battery down is on it and you
- 2 have to have it charged. It's a carbon
- 3 monoxide checker Model 262 with a pump SP202.
- 4 Manbuses, we are assigned manbuses
- 5 most of the time they are -- it's a poor
- 6 maintenance program on it. They want the
- 7 section electrician to take care of them. They
- 8 send them outside, but you may get one number
- 9 bus today and tomorrow you may get another
- 10 number and you don't know what's been done on
- 11 it. Poor record keeping on those.
- So at our mine, like I said, we --
- one ramcar, like I was talking about, CO
- 14 checking on it was 1,200 then it got on up to
- 15 2,000, and 2,500 you couldn't see a ramcar at
- 16 2,500 because of smoke emissions.
- 17 That's all I got.
- 18 MR. THOMAS TOMB: Okay. Thank you
- 19 very much. Any questions.
- MR. RONALD FORD: Mr. Cagle, you've
- 21 mentioned problems with the mobile equipment,
- 22 diesel-powered equipment. Have you had any

23 problems with the two pieces of diesel air

- 1 compressors and, if so, can you tell us what
- 2 they were?
- 3 MR. DWIGHT CAGLE: Well, in our
- 4 mines, we have to keep someone with these air
- 5 compressors, you know. I think they're bought
- 6 out in Utah. We've got water hooked up to them
- 7 for sprinkling, filters, and maintenance on
- 8 them. Usually, they are just sent all over the
- 9 mines, and, you know, they send them out, air
- 10 filters never get changed; there's no kind of
- 11 scrubber on those, as far emissions.
- MR. RONALD FORD: Has anybody
- 13 complained of any problems with the air
- 14 compressors --
- MR. DWIGHT CAGLE: Yes. We --
- 16 MR. RONALD FORD: -- or being around
- 17 them?
- MR. DWIGHT CAGLE: We have severe
- 19 headaches.
- MR. RONALD FORD: Thank you.
- 21 MR. THOMAS TOMB: Any other questions?
- MR. BOB HANEY: Mr. Cagle, how much

- 1 Walter Number 7?
- 2 MR. DWIGHT CAGLE: Minimum 20,000.
- 3 Usually, we get 25, -30,000.
- 4 MR. BOB HANEY: And that's in each
- 5 side of the section?
- 6 MR. DWIGHT CAGLE: Yes.
- 7 MR. BOB HANEY: Thank you.
- 8 MS. SANDRA WESDOCK: Mr. Cagle, I
- 9 have one question, and then I'll let you sit
- 10 down.
- 11 MR. DWIGHT CAGLE: Okay.
- 12 MS. SANDRA WESDOCK: You mentioned in
- 13 your testimony that the record keeping was
- 14 poor.
- MR. DWIGHT CAGLE: Yes, ma'am.
- 16 MS. SANDRA WESDOCK: Can you expand a
- 17 little bit on that? Is that there is missing
- 18 information, or that the information that is
- 19 recorded is inadequate? I mean, could you
- 20 explain a little bit?
- 21 MR. JAMES WOODS: Okay. We have what
- 22 you call a permissibility book that we register

- 1 our CO test. I reviewed the books this week,
- 2 and a lot of them hasn't been put in. I don't
- 3 know if they tested them and didn't put them in
- 4 or what, but it's a violation of the law. And
- 5 I talked to our coordinators and they're
- 6 supposed to get on top of it.
- 7 And another problem with the CO
- 8 checker, it's readily available, but usually
- 9 it's dead. If that answers your questions.
- MS. SANDRA WESDOCK: Thank you.
- MR. THOMAS TOMB: Who's responsible
- 12 for making those checks in your mine?
- MR. DWIGHT CAGLE: Usually, section
- 14 electricians.
- 15 MR. THOMAS TOMB: Section
- 16 electricians. Thank you.
- Our next presenter will be Mr.
- 18 Parker.
- MR. RICKY PARKER: Good morning.
- 20 My name is Ricky Parker, R-i-c-k-y P-a-r-k-e-r.
- 21 I'm a member of the UMWA, local 2368, Chairman
- 22 of the Safety Committee, and I've worked at Jim

- 1 years.
- In the 19 years that I have worked at
- 3 that mine, I have been a miner for
- 4 approximately 15 years of my job there. After
- 5 working on a mine, I have since then become a
- 6 ramcar operator. At our mine we have
- 7 approximately 32 pieces of equipment,
- 8 diesel-powered equipment with our diesel
- 9 ramcars on the face being Jeffrey 4110, which
- 10 have only a wetbed scrubber system, as far as
- 11 exhaust. We have approximately five
- 12 diesel-powered locomotives outby; five being
- 13 Eimco, one being Brookville. And we have 11
- 14 diesel-powered mantrips at that mine.
- On many occasions, we have been cited
- on our mantrips, diesel-powered mantrips, which
- 17 are Hagar mantrips, exhaust pipes not being
- 18 hooked up, broken into, what have you. We have
- 19 been cited at our mine: scrub systems on our
- 20 ramcars being jumped out, especially the Wagner
- 21 type. We have some Wagner type -- excuse me,
- 22 I didn't mention that -- Wagner diesel

23 ramcars.

- In 1993, we had an explosion in our
- 2 mine, which was not in any extent as to what
- 3 caused the explosion. But after the
- 4 investigation, it was found that two of the
- 5 scrubber systems on two of the ramcars on that
- 6 section was jumped out. Being a mine operator
- 7 for that many years, I was at that mine when we
- 8 totally ran electric cars, and I saw the diesel
- 9 ramcars come into place at that mine, I have
- 10 experienced effects of the sickness, burning of
- 11 the eyes when the diesel equipment come to the
- 12 face.
- Being a ramcar operator now myself, I
- 14 have seen -- at our mine we have some of the
- 15 newest equipment, with the Jeffrey 4110
- 16 ramcars, which is a far superior piece of
- 17 equipment than the Wagner that we used 20 years
- 18 at that mine. But still in conjunction with
- 19 that equipment as new as it is, there are still
- 20 many problems with this ramcar due to us
- 21 totally relying on ventilation to dilute the
- 22 diesel particulate matter, to render in

23 harmless.

- 1 When we take our test on the feeder,
- 2 we backup on the feeder and start to dump your
- 3 load, and you have your foreman in front with a
- 4 410 spotter taking a CO check and a NO2 check.
- 5 The only time that you have to report any
- 6 problems is if you find a problem with that,
- 7 you know, with your examination of the
- 8 spotter.
- 9 We feel that is not a reliable way to
- 10 exam this equipment, because we are underneath
- 11 the mine getting a load, the exhaust is
- 12 therefore being turned around, coming straight
- 13 on you, in your face.
- We have a mine operator at that mine
- 15 that can take off two weeks for vacation -- and
- 16 he's had respiratory problems, after equipment,
- 17 diesel equipment was brought into that line --
- 18 he can take off for two weeks vacation, come
- 19 back -- after that two weeks, he felt pretty
- 20 good, his respiratory problems would straighten
- 21 up, but at the very instant that he gets back
- in the face of diesel-powered equipment, it

- 1 flare up again, coughing, sore throat, numerous
- 2 problems in his chest.
- With the reports that the test that's
- 4 been conducting by NIOSH, where it states that
- 5 900 out of 1,000 miners can come down with lung
- 6 cancer for exposure to diesel particulate
- 7 matter, and due to the years of experience that
- 8 I've had being inby on face areas, running
- 9 diesel ramcar, it really frightens me as a
- 10 person that has been there in the face most of
- 11 the time, being exposed to the DPM.
- 12 It wasn't a short period of time ago
- 13 that we had an inspector riding a manbus in on
- 14 our mainline track that cited the company due
- 15 to the smoke that was coming off of that diesel
- 16 mantrip. We have had numerous citations issued
- in our mine because of maintenance, lack of
- 18 maintenance. We've had people come into the
- 19 safety office, our brothers and sisters,
- 20 complain of sore throats, burning of the eyes,
- 21 breathing problems, where our diesel
- 22 locomotives outby have been hauling supplies,

- 1 at least two if not three diesel locomotives to
- 2 push it in our mine on our track system. We
- 3 have a plan where we can take extended cuts
- 4 from our mine, which is 25 foot. When you have
- 5 two, three, pieces of diesel-powered equipment
- 6 running, I mean, wide-open as you can, trying
- 7 to produce as much coal as you can.
- 8 It is mind-boggling also in
- 9 conjunction with your outby piece of equipment
- 10 smoking come in on people on face; it's
- 11 mind-boggling how we cannot -- we haven't in
- 12 the past -- or not come up with a better
- 13 filtering system to render these diesel
- 14 particulates harmless on our people.
- I commend the state of Pennsylvania
- 16 for going that extra step to protect their
- 17 miners underground and to take that extra step
- 18 to render this diesel particulate matter
- 19 harmless.
- 20 We -- all the testing that is being
- 21 done in California in the EPA and the type of
- 22 dry systems available, I would like to take

- 1 this proposed rule as quick as possible, to
- 2 render this diesel particulate harmless for our
- 3 brothers and sisters underground.
- 4 That's all.
- 5 MR. THOMAS TOMB: Thank you, Mr.
- 6 Parker. Any questions?
- 7 MR. GEORGE SASEEN: You mentioned
- 8 your mantrip model type.
- 9 MR. RICKY PARKER: It's a Hagar
- 10 mantrip.
- 11 MR. GEORGE SASEEN: Do you know what
- 12 type engine is in there?
- MR. RICKY PARKER: Deutz.
- MR. GEORGE SASEEN: Deutz. Okay.
- MR. BOB HANEY: You said you run two
- 16 to three ramcars on the section.
- 17 MR. RICKY PARKER: Yes, sir,
- 18 continuously.
- MR. BOB HANEY: And do you know what
- 20 the air flow on your section is there at
- 21 Number --
- MR. RICKY PARKER: In our face areas,

- 1 an extended cut.
- 2 MR. THOMAS TOMB: How much?
- 3 MR. RICKY PARKER: 21,500 CFP.
- 4 MR. BOB HANEY: That's at the end of
- 5 your --
- 6 MR. RICKY PARKER: End of the line.
- 7 MR. BOB HANEY: Okay.
- 8 MR. RICKY PARKER: We sometimes have
- 9 in excess of that 26 to -30,000 with -- in the
- 10 last open crosscut 50 to -60,000. But in
- 11 conjunction with that, when you have three
- 12 diesel-powered locomotives outside in the outby
- 13 entries that's pushing an enormous amount of
- 14 weight, and you have manbuses that are
- 15 continuously running on our track with pumps
- 16 going to the different location, you have
- 17 foremen running in and out of the mine, you
- 18 have parts being transported continuously,
- 19 because that's a major -- that's our only
- 20 source of transportation is our track system.
- 21 And with all of that coming from outby onto the
- 22 sections, well, in conjunction with the

- 1 sections; I've seen the smoke come out of the
- 2 sections. People -- you know, I've been sick
- 3 before off of it. It's really scary and
- 4 something has got to be done or we're going to
- 5 have a bad case of a black-lung type epidemic
- 6 in this state.
- 7 MR. WILLIAM McKINNEY: I'm going to
- 8 assume you are using an exhaust, an wine
- 9 (phonetic) curtain on your face; right?
- 10 MR. RICKY PARKER: Yes, sir
- 11 MR. JON KOGUT: How many different
- 12 manbuses did you say you use at the mine?
- MR. RICKY PARKER: We have
- 14 approximately 11 manbuses.
- 15 MR. JON KOGUT: And is there a
- 16 regular maintenance program?
- 17 MR. RICKY PARKER: Yes, sir. There
- 18 is a regular maintenance program. We have a
- 19 type of PM system that is to be gone over every
- 20 day on these manbuses and the locomotives.
- 21 MR. JON KOGUT: When you see the
- 22 visible smoke from the manbuses, do you see

- 1 ones.
- 2 MR. RICKY PARKER: Well, it's like
- 3 anything, when you have a new manbus come in,
- 4 you know, very little any hours on that engine,
- 5 it's going to be clear-burning motor. When you
- 6 crank the manbus up, you can see the puff of
- 7 black smoke come out the side of the mantrip.
- 8 When you crank up the diesel locomotives -- our
- 9 locomotives have no filter-type system on the
- 10 exhaust, the exhaust is straight from the motor
- itself, and you'll see the black smoke come out
- 12 of it. And we may get so many hours on them
- 13 they won't start burning oil.
- So, you know, we look forward to the
- 15 new diesel regs that are pertained to the outby
- 16 equipment.
- 17 MR. JON KOGUT: But specifically on
- 18 the manbuses -- I'm not sure I quite understood
- 19 your answer. Did you say that you see the
- 20 black smoke from all of them when you crank
- 21 them up?
- MR. RICKY PARKER: Yes, sir.

23 Virtually, all of them when you crank them up.

- 1 Manbuses that have more hours on them than
- 2 others, you can see the smoke. That's one
- 3 reason we've been cited by MSHA is the smoke
- 4 that's being visible.
- 5 MR. JON KOGUT: Did you say that
- 6 you've only been cited once for that?
- 7 MR. RICKY PARKER: No, sir. Numerous
- 8 times.
- 9 MR. JON KOGUT: Specifically for --
- 10 MR. RICKY PARKER: One, for instance,
- 11 when the inspector was riding the bus himself.
- 12 MR. JON KOGUT: I see. Did you see
- 13 any relationship between the maintenance that
- 14 is performed on these manbuses and the smoke
- 15 that's visible?
- MR. RICKY PARKER: Yes, sir. On
- 17 numerous occasions, as being a safety
- 18 committeeman at that mine and chairman of the
- 19 safety committee, I have brought forth to the
- 20 attention of the company that there is a
- 21 problem with the manbus smoking, exhaust pipe
- 22 being broken away. They were supposed to

23 direct the exhaust pipe occupants of the

- 1 manbus. On many occasions, the lack of
- 2 maintenance has been a problem. Whereas, if a
- 3 machine is gone over every day, like it should
- 4 be, things will be noticed and the proper
- 5 attention should be diverted towards that
- 6 equipment, send it outside, get it corrected,
- 7 and get it back underground, so it's safe to
- 8 use underground.
- 9 MR. JON KOGUT: Are the manbuses used
- 10 for hauling equipment? Is that what it's used
- 11 for?
- 12 MR. RICKY PARKER: Manbuses primarily
- 13 are used to haul supplies, workers, small
- 14 pumps, stuff like that.
- MS. SANDRA WESDOCK: Mr. Parker, how
- 16 many diesel mechanics do you have at the mine?
- 17 MR. RICKY PARKER: Well, ma'am, on a
- 18 routine basis, all of our diesel shop is
- 19 outside, we would have two on day shift. They
- 20 primarily work on diesel equipment on day shift
- 21 right now. And our mine runs 24 hours a day.
- 22 And that's one of the things that we brought to

23 the company's attention. There's no way that

- 1 they can maintain this equipment in a proper
- 2 fashion with the manpower available at that
- 3 mine.
- 4 MS. SANDRA WESDOCK: And what type of
- 5 training do they get to work on this diesel
- 6 equipment at your mine?
- 7 MR. RICKY PARKER: They are certified
- 8 by Jim Walter, as far as being trained. We
- 9 have a committeeman at our mine that hopefully
- 10 will get to speak here shortly that is
- 11 certified in diesel-powered equipment, and he
- 12 can hopefully enlighten you further.
- MS. SANDRA WESDOCK: Thank you.
- MR. RICKY PARKER: You're welcome.
- 15 MR. GEORGE SASEEN: Sir, you
- 16 mentioned about CO and NO2 readings in the
- 17 feeder.
- MR. RICKY PARKER: Yes, sir.
- MR. GEORGE SASEEN: Do you have any
- 20 idea what kind of levels are typically there
- 21 when you have your ramcars in that area.
- MR. RICKY PARKER: The only time that

- 1 bimonthly inspection, and I take a reading
- 2 myself of that ramcar. Other than that, you
- 3 have a foreman that gets in front of the
- 4 machine and he's holding the instrument in
- 5 front of him -- and I have taken on occasion to
- 6 ask him what it is reading. And on occasion he
- 7 has acknowledged me, he'll show it me or tell
- 8 me what it is reading. Other than that, I
- 9 really can't say what is coming out of the
- 10 machine itself.
- 11 MR. GEORGE SASEEN: What kinds of
- 12 levels when he showed it to you?
- 13 MR. RICKY PARKER: Well, you know,
- 14 you have a warning level. When you get 50 of
- 15 CO, take it out of service or 5 NO2, and you
- 16 have a warning level which is 25 CO 2 and a
- 17 half, NO2. On occasions, I have seen the
- 18 warning level be invoked as far as 25 on the CO
- 19 and 2.5 on the NO2; other times I've seen,
- 20 especially in older ramcars, upwards over 40
- 21 PPM on the CO and upward levels of over two and
- 22 a half above the warning level on the NO2.

- 1 MR. RICKY PARKER: You're welcome.
- 2 MR. THOMAS TOMB: Any other
- 3 questions? Thank you very much Mr. Parker.
- 4 Our next presenter Mr. Pate. I'm not
- 5 sure if I'm pronouncing it right. Jeffrey
- 6 Pate.
- 7 MR. JEFFREY PATE: I wish to pass at
- 8 this time after all of that.
- 9 MR. THOMAS TOMB: Okay. Did I
- 10 mispronounce it?
- 11 MR. JEFFREY PATE: It's Pate,
- 12 P-a-t-e.
- MR. THOMAS TOMB: Oh, P-a-t-e. I'm
- 14 sorry.
- MR. GARY TRAMELL: Excuse me, can I
- 16 take his place --
- 17 MR. THOMAS TOMB: Sure.
- 18 MR. GARY TRAMELL: -- if he don't
- 19 want to.
- MS. SANDRA WESDOCK: What's your
- 21 name?
- MR. GARY TRAMELL: Gary Tramell.

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1 that, please?
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- 2 MR. GARY TRAMELL: G-a-r-y
- $3 \quad T-r-a-m-e-l-l.$
- 4 My name is Gary Tramell, G-a-r-y
- 5 T-r-a-m-e-l-l, local 2368 safety committeeman.
- 6 I work at Jim Walter Number 5, Brookwood,
- 7 Alabama.
- 8 One of my main concerns is I read in
- 9 some of your literature about these
- 10 high-pressured mines, and I've been listening,
- 11 too; each one of have asked a question about
- 12 the velocity of how many -- could we fit the
- 13 air inby the diesel pieces of equipment.
- 14 At Number 5 Mines, we've got areas
- 15 that are called dead areas; there would be
- 16 little or no air. And these pieces of
- 17 equipment on sections when they are changing
- 18 and waiting on one to load up and pull out,
- 19 they sit in a dead area with the engine running
- 20 and there would be little to no air. And those
- 21 operators are getting the particulates there.
- 22 At Number 5 Mines, we're probably

23 unique because we've got a faulthill (phonetic)

- 1 that probably runs somewhere in the
- 2 neighborhood 1,500, 2,000 feet, and it's on a
- 3 steep grade. When you get two motors with five
- 4 cars of tons of materials and things going into
- 5 the mines, these motors -- I've been there and
- 6 I've seen it, they are trying to push as hard
- 7 as -- you know the little train that just keeps
- 8 on chugging -- well, these things are trying to
- 9 pull that hill, and they smoke and you can't
- 10 hardly see the next operator, which is about
- 11 five cars up.
- 12 Those engines go through a lot of
- 13 wear and tear there. It's really hard to keep
- 14 them up.
- Just like Ricky told you, I am in
- 16 maintenance. And at Number 5 Mines, I'm
- 17 certified in diesel equipment. The outby
- 18 motors -- there's one outby electrician at our
- 19 mine, and his job is to take care of all of the
- 20 beltlines, do as much as he can on the outby
- 21 equipment, take care of all the pumps, just
- 22 numerous jobs, which really there's not enough

23 underground maintenance on these outby pieces

- 1 of equipment.
- 2 Just like I said, we try to work on
- 3 them, but we got to keep the mines running and
- 4 we got to keep that running.
- 5 As far as types of diesel fuels, we
- 6 had a problem -- and, you know, when we first
- 7 went into diesel -- it's been 15 years ago or
- 8 maybe 12 -- we had diesel fuels that wasn't
- 9 colored. In other words, they wasn't bygrad
- 10 grad A, grad B, onroad or offroad diesel fuels.
- 11 And what we was having was a lot of motormen
- 12 crying that the fumes burning them, a lot of
- 13 motorman getting sick -- because I've been
- 14 there and had other motorman coming to me and
- 15 telling me something is just wrong.
- 16 And what I was finding out at that
- 17 time was the people outside was getting mixed
- 18 up on what grad of fuel. They were sending a
- 19 lower grad fuel down underground, which it
- 20 should have been a higher grad fuel. And we've
- 21 got that straightened out. I hope, and I hope
- 22 we don't go back to it. But now we use

23 different colored mixtures in our diesel fuels

- 1 to make sure that it's adequate.
- 2 But there for a long time, we had
- 3 miners that were really complaining of sickness
- 4 and nose burns and eye burns.
- 5 And just like I said, when I was
- 6 certified, I had a one-week course at Jim
- 7 Walter Training Center. I think that's
- 8 supposed to be recertified effort once a year,
- 9 just like electrical retraining. And I haven't
- 10 been there to get that training again; it's
- 11 coming up soon. That's about the only question
- 12 I've got.
- MR. THOMAS TOMB: Any questions?
- MR. GEORGE SASEEN: Yes, sir. When
- 15 the study of the mechanic -- like if you have
- 16 fuel pump problems on the engines, do you send
- 17 them out? Do they have a rep come in, or do
- 18 you try to do any of that work?
- 19 MR. GARY TRAMELL: Are you talking
- 20 about fuel pumps?
- MR. GEORGE SASEEN: Fuel pumps.
- 22 MR. GARY TRAMELL: Most of the time

- 1 do that, but with the extent of training that
- 2 we got -- you can go to the school and not
- 3 being a diesel mechanic -- I'm not a certified
- 4 diesel mechanic. I'm just trained in diesel
- 5 rigs and how to do the work on the underground
- 6 equipment. They did give us some training in
- 7 adjusting the burn, after-burn of an engine.
- 8 And just like I said, if you don't use it every
- 9 day, you lose it.
- 10 MR. GEORGE SASEEN: So, most of it --
- 11 if there's problems you send --
- 12 MR. GARY TRAMELL: Most of the time
- 13 we send it out.
- MR. GEORGE SASEEN: -- send the
- 15 engines out?
- MR. BOB HANEY: Bob Haney. The dead
- 17 area you mentioned is that along the big
- 18 crosscut, you said you run?
- 19 MR. GARY TRAMELL: That's on the main
- 20 intake track.
- 21 MR. BOB HANEY: On your sections, do
- 22 you have a big piller in the middle?

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- 1 MR. BOB HANEY: On the sections --
- 2 MR. GARY TRAMELL: Yes. We have
- 3 large pillers that you get out of the way, so
- 4 the one that you're loading will come out.
- 5 MR. BOB HANEY: Right. While he's
- 6 sitting in that crosscut?
- 7 MR. GARY TRAMELL: Right. He'll sit
- 8 there with his motor running for when that one
- 9 passes him, and he gets back in against the
- 10 miners as quick as can.
- MR. BOB HANEY: Thank you.
- 12 MR. THOMAS TOMB: How much time does
- 13 he usually sit there?
- MR. GARY TRAMELL: It depends on -- a
- 15 lot of times a very short while, and then
- 16 sometimes a matter of 15 to 20 minutes. It's
- 17 according to if the miner gases out or they
- 18 have to extend the line --
- 19 MR. THOMAS TOMB: If it's a long
- 20 period --
- 21 MR. GARY TRAMELL: -- numerous
- 22 things.

- 1 period of time, do they turn it off, turn the
- 2 machine off?
- 3 MR. GARY TRAMELL: Sometimes they
- 4 will, if they know what's happening.
- 5 Sometimes, you know, it's according to how
- 6 far back they are, they'll leave them running
- 7 until they say, Well, they're just not going to
- 8 come back, so then they will. It all depends
- 9 on if they're communicating with each other.
- 10 MR. THOMAS TOMB: Do they always stay
- 11 with the machine?
- MR. GARY TRAMELL: Yes. They need
- 13 to.
- MR. RONALD FORD: If someone
- 15 complains of black smoke coming out, do you go
- 16 out and check out the machine?
- 17 MR. GARY TRAMELL: Yes, sir.
- 18 MR. RONALD FORD: And what do you do?
- MR. GARY TRAMELL: Well, what our
- 20 ramcars are equipped with is magnahelic
- 21 (phonetic) gauges; one for the intake, and one
- 22 for the exhaust. And, usually, if that

23 magnahelic gauge goes out of range, then that's

- 1 kind of a single that your filters or your
- 2 scrubbers are not doing it's job.
- 3 MR. RONALD FORD: Do you ever just
- 4 take the machine out of service, just because
- 5 it's got black smoke coming out of it?
- 6 MR. GARY TRAMELL: I'm not on the
- 7 section. I haven't worked sections in a long
- 8 time. But as far as the motorman and stuff, if
- 9 they complain about it enough, then the
- 10 supervisor might or he might not. You're
- 11 always short of equipment. And they'll try to
- 12 run that thing as much as they can.
- 13 MR. THOMAS TOMB: One other question.
- 14 Do you have any on your surface shops, in your
- 15 service shop area? Is it well ventilated or do
- 16 you have any problems with ventilation in that
- 17 area?
- MR. GARY TRAMELL: It's open door.
- 19 It's got two big doors opened. And as far as
- 20 ventilation, I don't think there's any fans on
- 21 it, and I think when it gets winter time,
- they're going to pull in them doors there.

cause a problem? 1 2 MR. GARY TRAMELL: Myself, they 3 haven't complained to me, as a safety member. 4 I don't know if they've had problems. 5 MR. THOMAS TOMB: Do you work there, 6 in the shop? 7 MR. GARY TRAMELL: No, I don't. I work underground. I'm an underground certified 8 9 electrician. 10 MR. THOMAS TOMB: Any other 11 questions? Thank you very much. What I'd like to do now is take a 15-minute break. 12 13 14 (Whereupon a 15-minute recess was taken, 15 after which the following proceedings were 16 had:) 17 18 MR. THOMAS TOMB: Okay, if we could 19 get started again, please. 20 Our next presenter Mr. Sartain. 21 Chuck is going to go first.

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Our next presenter is Chuck Stewart:

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- 1 name is Chuck Stewart, C-h-u-c-k S-t-e-w-a-r-t.
- 2 I'm Mine Manager of Jim Walter Resources Number
- 3 7 Mine. I'm accompanied today by Dale Byram,
- 4 Manager of Safety; Larry Jordan, Coordinator of
- 5 Diesel Maintenance Training; Ted Sartain,
- 6 Senior Ventilation Engineer. We express our
- 7 gratitude to Ms. Jones and the Committee for
- 8 the opportunity to participate today in the
- 9 rule-making process.
- 10 We appear on behalf of Jim Walter
- 11 Resources, Incorporated, a subsidiary of Walter
- 12 Industries, which owns and operates four deep,
- 13 underground coal mines in west-central Alabama.
- 14 Jim Walter Resources produces approximately
- 15 eight million tons annually and employs around
- 16 2,000 people.
- 17 The four mines operate in the Blue
- 18 Creek seam and range in depth from 1,300 to
- 19 2,200 feet.
- 20 COURT REPORTER: I'm sorry. My
- 21 battery is dead and my machine is not recording
- 22 the data.

- 1 to start?
- 2 MR. THOMAS TOMB: Just start over
- 3 again. So, she will have a complete record.
- 4 MR. CHUCK STEWART: Mr. Chairman and
- 5 members of the committee, my name is Chuck
- 6 Stewart, C-h-u-c-k S-t-e-w-a-r-t. I'm the Mine
- 7 Manager of Jim Walter Resources, Number 7 Mine.
- 8 I'm accompanied today by Dale Byram, Manager of
- 9 Safety; Larry Jordan, Coordinator of Diesel
- 10 Maintenance Training; and Ted Sartain, Senior
- 11 Ventilation Engineer. We express our gratitude
- 12 to Ms. Jones and the Committee for the
- 13 opportunity to participate today in the rule-
- 14 making process.
- We appear on behalf of Jim Walter
- 16 Resources, Incorporated, a subsidiary of Walter
- 17 Industries, which owns and operates four deep
- 18 underground coal mines in west-central
- 19 Alabama. Jim Walter Resources produces
- 20 approximately eight million tons annually and
- 21 employs around 2,000 people.
- The four mines operate in the Blue

23 Creek seam and range in depth from 1,300 feet

- 1 to 2,200 feet deep. The coal is soft, highly
- 2 fractured and very gassy. Therefore,
- 3 ventilation is a crucial aspect of our daily
- 4 operations. In fact, fresh air enters each of
- 5 our mines at rates ranging from 1.8 to 3.6
- 6 million cubic feet per minute, requiring between
- 7 9,000 to 14,000 fan horsepower, respectively.
- 8 Although Jim Walter Resources has
- 9 been utilizing diesel-powered air compressors
- 10 underground since the late 1970s, the first
- 11 piece of self-propelled, diesel-powered
- 12 equipment was introduced to a Jim Walter mine
- 13 in 1984. The employment of that first
- 14 rail-mounted personnel carrier opened our eyes
- to the superiority of diesel-power over battery
- or trolley-powered. Today Jim Walter operates
- 17 around 200 diesel-powered machines
- 18 underground. Breaking these 200 units down
- 19 into category, we have approximately 70 inby
- 20 units, 30 heavy-duty outby units, and about 100
- 21 light-duty outby units.
- 22 There are numerous reasons why Jim

23 Walter Resources and many other coal operators

- 1 have converted their haulage and support fleets
- 2 to diesel power. These include: improved
- 3 safety, reliability, versatility, and
- 4 availability. Reflecting back to when all of
- 5 our mantrips were battery powered, weak
- 6 batteries often resulted in coasting or pushing
- 7 the manbus to the section charger.
- 8 If an incident occurred early in the
- 9 shift requiring immediate evacuation, that crew
- 10 probably would have had a problem getting out
- in a timely manner. However, diesel-powered
- 12 mantrips are almost always available, which is
- 13 a valuable asset in not only production, but
- 14 more importantly in emergency situations.
- 15 Having been involved in the evacuation and
- 16 recovery of three mine fires, I cannot
- 17 overstate the importance of the availability
- 18 and reliability provided by diesel equipment.
- During the 1986 gob fire at Number 3
- 20 Mine, I remember trying to gather additional
- 21 fire-fighting equipment on a battery-operated
- 22 jeep that was going dead, wondering if I was

- 1 important was the fact I would have had to walk
- 2 three to five miles to get back outside the
- 3 mine if things suddenly turned worse.
- 4 It's also quite possible that our Number
- 5 Mine would be sealed today had our outby
- 6 fleet been electric powered, during the fire of
- 7 1995.
- 8 We strongly believe that
- 9 diesel-powered equipment in our coal mines
- 10 provides distinct operational and safety
- 11 advantages and can be operated without
- 12 compromising the health and safety of our
- 13 workers. While there has been occasions --
- 14 occasional cases of excessive smoke due to
- 15 engine malfunction or incidental disruptions in
- 16 ventilation, these incidents are few and far
- 17 between and are corrected in a timely manner.
- 18 Jim Walter Resources utilizes the
- 19 cleanest burning engines available and probably
- 20 has the highest ventilation rates of any coal
- 21 mine in the country. At Number 7 Mine, where I
- 22 work, fresh air enters the mine at the rate of

- 1 average airflow in the last open crosscut is
- 2 around 55,000 CFM. That's ten times the
- 3 name-plate requirement for gaseous emissions on
- 4 our ramcars. Airflow on our outby haulage ways
- 5 typically exceeds 100,000 CFM. MSHA's proposed
- 6 rule does not credit the operators' ability to
- 7 dilute and render harmless diesel particulate
- 8 matter in way of ventilation.
- 9 We realize that MSHA's received
- 10 comments suggesting that particulate filters be
- 11 required on all equipment, including equipment
- 12 classified as "light duty". Readings from our
- 13 mine-wide monitoring system indicate that CO
- 14 concentrations at the section belt tailpieces
- 15 normally stay around one part per million,
- 16 which is an indicator that outby diesel
- 17 equipment contributes only a small amount of
- 18 contaminants to the overall air stream.
- 19 We believe that safe exposure levels
- 20 can be maintained by applying an integrated
- 21 approach that involves: engine and fuel
- 22 selection, maintenance, training, ventilation,

- 1 exhaust after-treatment.
- 2 Prior to final rule, safe exposure
- 3 levels for diesel particulate matter should be
- 4 scientifically established and operators should
- 5 be given the flexibility to use any of the
- 6 available options, including those outlined in
- 7 MSHA's Toolbox, to achieve compliance.
- 8 UCLA basketball coach John Wooden
- 9 once said, "All progress involves change, but
- 10 not all change is progress." This statement
- 11 summarizes our concern that MSHA is trying to
- 12 solve a problem that it claim to perceive, but
- 13 does not fully understand.
- 14 At this time I will turn this over to
- 15 Dale Byram.
- MR. DALE BYRAM: My name is Dale
- 17 Byram, and I'm Manager of Safety and Training,
- 18 Jim Walter Resources.
- 19 In the preamble MSHA cites several
- 20 studies to justify the need to limit miners'
- 21 exposure to the DPM, and Jim Walter maintains
- 22 that MSHA has failed at this particular point

23 in time to substantiate through the studies

- 1 that current level, exposure levels, of the DPM
- 2 do place our miners at risk. We believe that
- 3 the current diesel regulations have appropriate
- 4 quidelines to test and to insure the immediate
- 5 health and the safety of our miners. However,
- 6 at Jim Walter Resources, we support and
- 7 encourage the research to determine if there
- 8 are exposure limits there that should be set,
- 9 because we don't want anything in our mine that
- 10 could create a health hazard for any of our
- 11 miners.
- We understand the difficulties of
- developing rules that unquestionably insure the
- 14 health and safety of the miner, while at the
- 15 same time giving reasonable consideration to
- 16 the operators trying to implement these new
- 17 rules. The intent of the proposed rules is to
- 18 insure the health and safety of the miner, and
- 19 we support this concept completely, yet the
- 20 procedures appear to be a bit excessive and
- 21 some burdensome to the industry.
- 22 We understand that NIOSH and NCI are

- 1 involving the medical histories underground
- 2 miners in both metal and nonmetal mines. The
- 3 result of the study, when complete, will
- 4 constitute probably the best available
- 5 information, and this should be considered in
- 6 the risk assessments prior promulgation of the
- 7 rule.
- 8 I'd like to speak if I could about
- 9 two particular cases that I'm aware of to where
- 10 a workman's compensation situation developed
- 11 from exposure to diesel, to a diesel fuel.
- 12 You've already heard from Mr. Capley, and he
- 13 certainly is one of our employees and he went
- 14 through this event.
- We had another employee at one of our
- 16 mines, Number 5 Mine, and he has a history of
- 17 similar reactions requiring medical treatments
- 18 with various other respiratory irritants, such
- 19 as smoke from an electrical fire, and them from
- 20 another situation from a chemical degreaser.
- 21 Co-workers in the same atmosphere at the time
- 22 that this gentleman had these separate

23 episodes, did not suffer the same adverse

- 1 reactions.
- 2 In review of this particular
- 3 situation, we would like for this not to be
- 4 generalized. This episode should be looked at
- 5 specifically. You know, is it possible that it
- 6 resulted from the individual's specific nature
- 7 of the idiosyncracy of his lungs that respond
- 8 to any type of a respiratory irritant or some
- 9 other intolerant chemical in the air.
- 10 Moreover, we cannot concluded from
- 11 that one case of an individual. This
- 12 particular individual involved should not
- 13 substantiate the fact that diesel particulates
- 14 or diesel fumes can create this type of a
- 15 problem for any employee.
- In reference back to Mr. Capley, I
- 17 think we heard with Mr. Capley -- and he can
- 18 correct me, please do, if I'm wrong on this --
- 19 that there had been a problem recognized in
- 20 review with that exhaust system on that
- 21 particular piece of equipment, and Mr. Capley
- 22 suffered lung irritation, which did progress

23 into pneumonia. And we regret this, as we do

- 1 any injury or illness that may take place in
- 2 our mines with any of our employees.
- 3 As Chuck mentioned earlier, we've
- 4 been operating diesel-powered equipment
- 5 underground for about 20 years. And for the
- 6 past several years, we've had about 200 pieces
- 7 of diesel equipment. Our medical records do
- 8 not suggest that we have chronic health
- 9 problems that's resulted from the exposure of
- 10 this diesel equipment or diesel exhaust. As in
- 11 the past, the medical history of Jim Walter's
- 12 employees, underground miners, will continue to
- 13 be monitored for signs of work-related health
- 14 risks.
- JWR has always accepted it's
- 16 responsibility to provide a healthy work
- 17 environment, and agrees that safe levels of the
- 18 DPM, once determined, must be maintained. At
- 19 this point, we're not convinced that the DPM
- 20 exposure levels in our mines are placing our
- 21 miners at a health risk that warrants such
- 22 stringent requirements in the proposed rule.

- 1 proposed rule, is that there is yet a reliable
- 2 and accurate sampling device that can detect
- 3 the DPM at low levels. Based upon that
- 4 admission, we question, then, the credibility
- of all the data, when you look at research that
- 6 we have in the Boriac (phonetic) case to where
- 7 it contradicts some of the epidemiology results
- 8 that was listed in the papers. Then we feel
- 9 that there is such contradiction out there that
- 10 we, as an industry, and the UMWA and the
- 11 agencies who work together to try and determine
- 12 what is adequate, what is for our people.
- 13 Also, missing from the risk
- 14 assessment equation is a scientifically-based
- 15 exposure limit. If sufficient evidence existed
- 16 to determine a quantifiable exposure level
- 17 presenting a health threat, we feel that NOISH,
- 18 ACGIH, and EPA, or some other agency would have
- 19 already established a PEL. To our knowledge,
- 20 this conclusive evidence does not yet exist.
- 21 Until that point and time, again, we should
- 22 work together and combine our efforts to

23 determine what these safe levels are.

- 1 Thank you. At this time I'd like to
- 2 bring Mr. Larry Jordan to the stand.
- 3 MR. LARRY JORDAN: Mr. Chairman, my
- 4 name is Larry Jordan, L-a-r-r-y J-o-r-d-a-n.
- 5 I'm Coordinator of Diesel Maintenance Training
- 6 for Jim Walter Resources. One of my primary
- 7 functions at Jim Walter Resources is
- 8 administering the underground diesel
- 9 qualification training and safety retraining
- 10 programs for all personnel that maintain diesel
- 11 equipment.
- In addition, I'm involved with the
- 13 underground diesel compliance monitoring for
- 14 all four mines. I also work with several
- 15 committees in developing fire suppression
- 16 systems, on-board CO monitoring on inby and
- 17 outby equipment, and other systems relating to
- 18 existing MSHA requirements for underground
- 19 diesel-powered equipment.
- 20 A few years ago a man named Nobert
- 21 Paas introduced to the industry a product he
- 22 developed and currently sells called the DST

- 1 claimed that the DST System, which is a
- 2 dry-system exhaust heat exchanger that
- 3 incorporates the use of a disposable
- 4 particulate filter, was capable of removing
- 5 more than 95 percent of a particle matter from
- 6 the engine exhaust. He also claimed that this
- 7 technology was applicable to the variety of
- 8 engines used in underground coal mines.
- 9 Although at that time I believe it had only
- 10 been tested on one particular engine. More
- 11 recent testing indicates that the DST System
- 12 can only be relied upon to provide 95 percent
- 13 reduction of the DPM.
- 14 The proposed rule is obviously based
- on the premise that the DST, or similar device,
- 16 would be employed by the operators to achieve
- 17 compliance. Based upon that assumption, Jim
- 18 Walter Resources estimates the cost of
- 19 compliance to be at least 5,575,000. This
- 20 figure only represents the cost to retrofit the
- 21 existing 100 machines effected by this rule and
- 22 was derived from the estimate that of 36,500

- 1 64,000 per unit to retrofit the 30
- 2 locomotives.
- 3 The locomotive issue is the most
- 4 troublesome because retrofitting may require
- 5 engine replacement and major frame modification
- 6 to provide enough space to accommodate the DST
- 7 and after-treatment device.
- 8 In addition, to retrofit cost, we
- 9 estimate the annual filter replacement to be at
- 10 lest 10,000 per machine, which equates to 1
- 11 million per year. These figures are based on
- 12 the three-shift filter life, however, we know
- 13 that a local coal mine, which utilizes the
- 14 disposable filters on ramcars, changes the
- 15 filters on a shiftly basis -- and I think that
- 16 was stated earlier. Changing filters three
- 17 times as often, will obviously costs three
- 18 times as much, to say nothing of the down-time
- 19 cost involved. Worse still, if MSHA mandates
- 20 the proposed rule for all the underground
- 21 diesel-powered equipment, including light duty
- 22 outby equipment, all the cost at JWR to

- 1 double.
- 2 This is an exorbitant price to pay to
- 3 apply an unproven technology to solve a problem
- 4 that may not even exist.
- 5 Since MSHA issued the advance notice
- of the proposed rulemaking, in '92, there's
- 7 been a flurry of activity in the area of
- 8 exhaust after-treatment development; however,
- 9 it seems that all have fallen short of the 95
- 10 percent mark. Our observation is that existing
- 11 technology is probably only capable of
- 12 providing reliable capture efficiencies in a
- 13 range of 60 to 80 percent.
- 14 I have information from NETT
- 15 Technologies, 3M Particulate Technologies, CEP
- 16 Products, Engelhard Emission Control Products,
- 17 and Johnson Matthey Environmental Products, all
- 18 admitting that the efficiency of the their
- 19 products is well below the 95 range that would
- 20 be required.
- 21 Also there is some inherent problems
- 22 associate with the use of disposable

- 1 fire hazard. Another area to consider with
- 2 after-treatment filters is the possible damage
- 3 that could result to the engine when the filter
- 4 begin to restrict the amount of airflow into
- 5 the combustion chamber. Improper airflow will
- 6 affect the engine components, such as valves,
- 7 injectors, and pistons, and these components
- 8 will show excessive carbon buildup.
- 9 Excessive carbon buildup will in turn
- 10 result in contamination of the lubricant.
- 11 Ultimately, contamination of the lubricant will
- 12 likely affect engine performance, ironically
- 13 producing higher CO and DPM levels.
- 14 MSHA's proposed rule is neither
- 15 technology nor economically feasible at this
- 16 time. Current after-treatment technology is
- 17 simply not capable of providing the 95 percent
- 18 capture efficiency required by the proposed
- 19 rule. Moreover, MSHA has grossly
- 20 underestimated cost of applying high-efficiency
- 21 filtration to the vast amount of existing
- 22 equipment subject to the proposed rule.

- 1 resolved, JWR will continue to provide a sound
- 2 diesel maintenance training program that
- 3 promotes optimum engine performance.
- 4 Now I'd like to introduce Ted.
- 5 MR. TED SARTAIN: Hello, my name is
- 6 Ted Sartain, S-a-r-t-a-i-n. I'm the Senior
- 7 Ventilation Engineer at Jim Walter Resources
- 8 and also service the Company's delegate on the
- 9 National Mining Association's Diesel Task
- 10 Group, of which I have been an active
- 11 participant for past ten years. I'd like to
- 12 just take a few more minutes to summarize our
- 13 company's position on the proposed rule.
- We maintain that diesel-powered
- 15 equipment offers distinct safety and
- 16 operational advantages over most of its
- 17 electrically powered counterparts. We strongly
- 18 believe that continued use of underground
- 19 diesel-powered equipment is essential for the
- 20 viability of the U.S. Coal industry in the very
- 21 competitive world market. The industry can
- 22 ill-afford over-restrictive and unduly

23 burdensome regulations, which could potentially

- 1 eliminate the use of diesel engines
- 2 underground.
- 3 The filter requirement that MSHA is
- 4 proposing is one of the primary components of
- 5 the Pennsylvania State Law, which has resulted
- 6 with two exception in the continued absence of
- 7 underground diesel equipment in that state.
- 8 Concerning the long-term health risk
- 9 associated with DPM, the jury is still out,
- 10 which is the reason why a PEL does not exist
- 11 today. JWR contends that the best available
- 12 evidence does not support MSHA's theory that
- 13 the current underground exposure to diesel
- 14 particulate matter place miners at risk of
- 15 material impairment of health or functional
- 16 capacity. In view of today's time constraints,
- 17 we have elected not to address the health risk
- 18 issue in full detail, but refer you to the
- 19 forthcoming post-hearing comments to have
- 20 National Mining Association, which we fully
- 21 sport.
- 22 On the issue of feasibility, as Larry

23 discussed earlier, this proposed rule is

- 1 neither technologically nor economically
- 2 feasible. The agency has obviously
- 3 overestimated the capability of current
- 4 after-treatment technology, and we feel grossly
- 5 underestimates the cost to apply it.
- 6 Also by simply mandating a single
- 7 method of control technology, the agency fails
- 8 to promote other available industrial hygiene
- 9 practices. Sound industrial hygiene requires
- 10 three ingredients: a scientifically-based
- 11 exposure limit, an accurate and reliable
- 12 personal sampling method, and an integrated
- 13 approach to control exposure.
- 14 This proposed rule contains none of
- 15 these elements and quite frankly flies in the
- 16 face of sound industrial hygiene.
- JWR realizes that as diesel usage
- 18 continues to increase, miners' exposure to the
- 19 exhaust contaminants must be maintained at safe
- 20 levels. However, MSHA should exercise prudence
- 21 in their endeavor to regulate diesel
- 22 particulate exposures. We encourage MSHA to

- 1 study, to determine exactly what the maximum
- 2 safe exposure level is, and to continue
- 3 research to develop an accurate and reliable
- 4 personal sampling method for use in underground
- 5 coal mines. Then adopt a performance-based,
- 6 integrated approach that is both
- 7 technologically and economically feasible and
- 8 will insure the highest level of protection to
- 9 the miner.
- 10 Thank you.
- 11 MR. THOMAS TOMB: Thank you. I don't
- 12 know whether the panel knows, but all these
- 13 gentlemen that have responded, any question to
- 14 their presentation. Any question?
- MR. TED SARTAIN: You can give us
- 16 your questions, and we can decide who best to
- 17 answer them.
- 18 MR. JON KOGUT: I have a couple of
- 19 questions, first of all that relate to the
- 20 written comments that Mr. Sartain submitted
- 21 prior to this hearing. Well, maybe before I
- 22 get to that, I think you said that the first

- 1 of the Jim Walter Mines in Alabama in 1987. Is
- 2 that right?
- 3 MR. CHUCK STEWART: I think it was
- 4 '84.
- 5 MR. JON KOGUT: '84. And give you --
- 6 give us some idea of once that introduction
- 7 began how rapidly the process of dieselization
- 8 took place until you reached your current
- 9 levels?
- 10 MR. CHUCK STEWART: I think to give
- 11 you an accurate account, we would need to go
- 12 back and we could pull up the records and tell
- 13 you exactly when the equipment -- you know, got
- 14 each one, such as ramcars, locomotives,
- 15 rhombuses. I think we started basically
- 16 improving our haulage, rhombus fleet --
- 17 MR. TED SARTAIN: Our outby fleet was
- 18 first, and then at a later date, I would say,
- 19 probably late '80s or early '90s, we began to
- introduce diesel-face haulage equipment.
- 21 MR. JON KOGUT: You began to
- 22 introduce it, and then how rapidly --

- 1 consider it a steady increase. I don't think
- 2 we just overwhelmingly introduced a large group
- 3 in a short time frame. I think it would be
- 4 best to categorize it as a steady increase over
- 5 the past 15 years or so.
- 6 MR. JON KOGUT: So, when would you
- 7 say you achieved your current level of
- 8 dieselization?
- 9 MR. CHUCK STEWART: I think it
- 10 continues to grow incrementally, but probably
- 11 the last couple of years. And we can give you
- 12 more accurate information.
- 13 MR. JON KOGUT: If it would be
- 14 possible for you to do that, I would very much
- 15 appreciate your submitting that for the
- 16 hearings. But in any case, you say that you
- 17 didn't introduce this equipment all at once in
- 18 the mid-'80s, so that in the case of lung
- 19 cancer, for example, which has a rather
- 20 notoriously long latent period, which sometimes
- 21 doesn't appear for 20 years after exposure. Is
- 22 it correct for us to assume that many of the

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- 1 equipment in your mines have not been exposed
- 2 for anywhere near 20 years? Is that right?
- 3 MR. CHUCK STEWART: I think most of
- 4 them would have been exposed to some part, you
- 5 know, to some percentage of diesel exposure.
- 6 It may have been one manbus that ran the
- 7 intakes, and it's just gradually increased
- 8 through the years. I'd have to agree as the
- 9 years have grown, the amount of exposure has
- 10 probably increased because of more equipment.
- MR. TED SARTAIN: However, as some
- 12 have mentioned, we are doing things better
- today, than we did 15 years ago, especially
- 14 since the adoption of the Federal Health and
- 15 Safety Regulations for diesel-powered equipment
- 16 used underground; better maintenance, better
- 17 training, better field selection, engine
- 18 selection. I think all of that has to be
- 19 considered. I don't think we can simply assume
- 20 that since diesel usage has incrementally
- 21 increased with time that exposure has also
- 22 followed that same trend, because we obviously

- 1 years ago.
- 2 MR. JON KOGUT: Well, my main intent
- 3 in asking that question and in asking you to
- 4 try to provide us with some sort of historical
- 5 record of the progression of the dieselization
- 6 is that in the written comments that you've
- 7 submitted, you made a statement that to date --
- 8 I'm quoting now -- "To date the medical history
- 9 of our employees does not include a single case
- 10 of lung cancer, chronic illness, or material of
- 11 impairment of health due to exposure to diesel
- 12 exhaust." And in order for us to assess the
- 13 significance of that claim, I think we need to
- 14 know -- we need to have some idea of how long
- 15 the workers in your mines have actually been
- 16 exposed to diesel and to what extent. So, if
- 17 you could give --
- 18 MR. TED SARTAIN: We will try to give
- 19 you some type of historical account.
- 20 MR. JON KOGUT: The other thing is
- 21 that in reference to that same statement, when
- 22 you say that there hasn't been any indication

- 1 illness or a material impairment, do you mean
- 2 that that none of the workers in any of your
- 3 mines have exhibited any lung cancer, there
- 4 have been no cases of lung cancer that have
- 5 developed in any of the workers at your mine?
- 6 What do you mean exactly?
- 7 MR. DALE BYRAM: I guess, when I made
- 8 reference earlier to the two individual cases
- 9 related to workman's comp, to my knowledge,
- 10 that's the only two workman's comp cases that
- 11 we've had --
- 12 MR. JON KOGUT: Was there --
- MR. DALE BYRAM: I'll get to the
- 14 cancer question -- workman's comp cases
- 15 compensable to anything related to diesel
- 16 particulate or fumes in the respiratory
- 17 As far as carcinogen -- and looking at the
- 18 state of Alabama -- my concern is where cancer
- 19 where is one of the third leading causes of
- 20 death in Alabama, and has been so for over ten
- 21 years, we will -- when we employ 2,000 people,
- 22 on the average, say over the last ten years,

- 1 will unfortunately suffer cancer, but to be
- 2 able tie that to a diesel incident, I think we
- 3 would first have to have a diesel workman's
- 4 comp incident, and then have physicians to
- 5 determine whether cancer was a result of that.
- 6 But to I guess and go back and answer
- 7 your question, I personally know no such
- 8 connection at this point and time. Now, Mr.
- 9 Capely made references to the fact that he has
- 10 been diagnosed with a spot on his lung -- and,
- 11 you know, I don't know anything about that -- I
- 12 certainly do not question Mr. Capely at all.
- 13 But to be able to say that there's been a
- 14 connection to the two, I think with his
- 15 comment, we can't guarantee that that's
- 16 happened.
- MR. JON KOGUT: Well, the statement
- 18 doesn't exactly say that you haven't been able
- 19 to guarantee that there's a connection with
- 20 diesel exhaust. What it says, that there has
- 21 been no case of material impairment, and, in
- 22 particular, lung cancer due to diesel exhaust.

23 But now you're saying that probably there have

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- 1 been cases of lung cancer --
- 2 MR. DALE BYRAM: I --
- 3 MR. JON KOGUT: What I hear you
- 4 saying is that you have no way of knowing
- 5 whether those were due to diesel exhaust or
- 6 not.
- 7 MR. DALE BYRAM: I think that
- 8 medically -- that medically, there would have
- 9 to be a diagnoses given from a physician, with
- 10 someone who has cancer, that says it was
- 11 directly related to, or even possibly strongly
- 12 related to the diesel particulate or to the
- 13 exposure to diesel for anybody to be able to
- 14 connect the two.
- 15 And then I said -- if you don't mind
- 16 to clarify, to try and put this in perspective.
- 17 In the state of Alabama, for several years,
- 18 cancer has been one of top three leading causes
- 19 of death. In a company that employs 2,000
- 20 people, on the average for the last ten years,
- 21 we certainly have unfortunately had some people
- 22 that have been diagnosed with lung cancer. But

- 1 a diesel issue, I have to say, "No. I'm not
- 2 aware of any cases, "because again the only way
- 3 that you would see a connection would be if it
- 4 was tied in as some form of a workman's comp,
- 5 work-related illness. That would be diagnosed
- 6 by a physician as to the connection. Is that
- 7 -- am I wrong in thinking that?
- 8 MR. JON KOGUT: No. I just think
- 9 that what you're saying varies slightly
- 10 different from the implication of the sentence,
- 11 as you have it here.
- MR. DALE BYRAM: I think the
- 13 implication says that we have not had any
- 14 history. Is that right?
- MR. JON KOGUT: Well, I'll read it
- 16 again. It says, "To date, the medical history
- 17 of our employees does not indicate a single
- 18 case of lung cancer, chronic illness or
- 19 material impairment of health due to exposure
- 20 to diesel exhaust." And if I might interpret
- 21 what you're saying, you don't have any direct
- 22 evidence that any of these cases are due to

23 diesel exhaust?

1	MR	THOMAS	TOMB:	Or	not?
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- 2 MR. JON KOGUT: Or not --
- 3 MR. DALE BYRAM: I'm sorry.
- 4 MR. JON KOGUT: I gather from that
- 5 you also don't have any direct evidence that
- 6 any of the case that you've observed are not
- 7 from the diesel exhaust.
- 8 MR. DALE BYRAM: I guess that would
- 9 have to be -- I guess, in a way, I really don't
- 10 know how to respond to that, other than to say,
- 11 you know, you're asking me to prove that they
- 12 are or not --
- 13 MR. JON KOGUT: No. I'm not asking
- 14 you to prove anything. I'm just asking you --
- MR. DALE BYRAM: Okay. Let me carry
- 16 this a step further in another direction, if
- 17 you don't mind. Unless an employee came to us
- 18 and disclosed that he has lung cancer and that
- 19 he felt that it was related to the diesel, the
- 20 company would not have any knowledge of that,
- 21 and due to patient confidentiality, even in the
- 22 claims and insurance departments, if they were

23 paying claims associate with cancer, lung

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- 1 cancer, whatever, they couldn't assume and we
- 2 couldn't assume. It would have to be a direct
- 3 claim and then a diagnosis.
- 4 I guess to go back and try and
- 5 finally answer your question. At this point in
- 6 time, I do not know of any situation to where
- 7 -- and again I'll have to make reference to
- 8 workmens' compensation because that's where you
- 9 would have your related illness tied into a
- 10 company, the records, to where we have a lung
- 11 cancer situation directly related to or
- 12 indirectly related to diesel emissions.
- MR. JON KOGUT: Okay. And apart from
- 14 the question of lung cancer, what about other
- 15 -- what about chronic respiratory diseases?
- 16 Have you experienced some instances of chronic
- 17 respiratory diseases among workers at your
- 18 mines?
- 19 MR. DALE BYRAM: Okay. I heard our
- 20 co-workers make reference to the effects that
- 21 they have suffered or that they have seen other
- 22 co-workers suffered, but to be statistically

1 compensable cases that I'm aware of where the

- 2 two that I made reference to.
- 3 So, if a guy or a lady has a problem,
- 4 and they bring it to us and they want to go to
- 5 the doctor, then certainly we will send them to
- 6 the doctor. We will never fail in that. I'm
- 7 not aware of any other cases that are
- 8 compensable other than the two that I made
- 9 reference to.
- 10 So, does it exist? I don't know.
- 11 MR. THOMAS TOMB: I'd like to tack on
- 12 a question similar to what Jon is leading to
- 13 here. Mr. Byram, in your presentation, I'm not
- 14 sure that I got the words exactly right, but
- 15 you indicated that your miners are monitored
- 16 for health risk. And my question is: What do
- 17 you have in place that monitors the miners for
- 18 health risk?
- 19 MR. DALE BYRAM: Just being generally
- 20 aware of any kind of a pattern that may
- 21 develop. Again --
- MR. THOMAS TOMB: Using what kind of

1	MR.	DALE	BYRAM:	You	have	t.o	αn	off

- of it, if it's work-related illness, you'd have
- 3 to go off of your reports to your safety
- 4 departments or your workman's compensation.
- 5 MR. THOMAS TOMB: You're getting back
- 6 to the workman's compensation?
- 7 MR. DALE BYRAM: Yes, sir. There
- 8 again there has to be some kind of a pattern to
- 9 develop to the point that if a pattern
- 10 develops, then there's a problem somewhere, and
- 11 you have to go to the root of the cause to
- 12 correct the problem.
- MR. JON KOGUT: I just have maybe
- one other comment, it's not really a question,
- 15 but may be you could address my comment. A
- 16 couple of you, I think, mentioned or implied
- 17 that the jury is still out on diesel
- 18 particulate. I just wanted to mention a couple
- 19 of events that have occurred, since the time
- that we published this proposal, that aren't
- 21 really documented in the proposed rule.
- The first one is that in the proposed

23 rule, we mentioned that the state of California

- 1 was looking at diesel exhaust at that time and
- 2 seeing if it should be classified as a toxic
- 3 air contaminant. Since the time of this
- 4 publication, the scientific advisory to the
- 5 California Air Resources, which is part of the
- 6 California EPA, unanimously recommended that
- 7 diesel exhaust -- that was their initial
- 8 recommendation was listed as a toxic air
- 9 contaminant in the state of California. And
- 10 that recommendation was ultimately adopted by
- 11 the California EPA with one modification, which
- 12 was that they changed the -- they changed it
- 13 from diesel exhaust to diesel particulate. So,
- 14 the state of Alabama now as of August 27th,
- 15 1998, has identified diesel particulate as a
- 16 toxic air contaminant.
- 17 And the second thing that's happened
- 18 since we published the proposed rule: Is that
- 19 the Federal Advisory Board to the National
- 20 Toxicology Program, scientific advisory board
- 21 to the National Toxicology Program, which is
- 22 the U.S. Government Agency that maintains the

23 National list of carcinogens, has recommended

- 1 that diesel exhaust be listed as a carcinogen
- 2 on that list. That particular recommendation
- 3 still needs to get approval from the secretary
- 4 of health and human services.
- 5 MR. CHUCK STEWART: I have a question
- 6 for you. Have they established permissibility
- 7 levels or threshold limits for this exposure?
- 8 MR. JON KOGUT: In the state of
- 9 California the advisory board concluded that
- 10 there was no evidence that there was any safe
- 11 level for diesel particulate.
- 12 MR. CHUCK STEWART: I wonder if this
- is the same group that list rock dust as a
- 14 possible carcinogen also.
- MR. JON KOGUT: Not to my knowledge.
- MR. THOMAS TOMB: Sandra.
- 17 MS. SANDRA WESDOCK: I think it was
- 18 Mr. Sartain. You talked about the proposal
- 19 being economically and technologically
- 20 infeasible. Did the company do an analysis or
- 21 a study? What data are you using to support
- 22 your statement that the proposal is infeasible,

- 1 to your company, would you be able to submit it
- 2 for the record?
- MR. TED SARTAIN: Yes, we have some
- 4 quotations from vendors on exhaust
- 5 after-treatment cost, retrofit cost. And that
- 6 was the data that was used in Larry's
- 7 statements that we estimate retrofit; for
- 8 instance, the DST System to the equipment that
- 9 would be affected by the rule is in excess of
- 10 \$5 million. That's just a lump-sum cost
- 11 initially within the 18 month, or whatever,
- 12 time frame that we would be required to get
- 13 those systems in place, not to mention the fact
- 14 that filter replacement cost, with the
- 15 disposable filter replacement cost, are
- 16 estimated to be -- and these estimates are
- 17 based on data like the gentlemen from T&M
- 18 stated that they change filters once a shift.
- 19 Our estimates were based on manufacture claims
- 20 that you can get three shifts life out of a
- 21 filter, and they extrapolated out to \$10,000
- 22 per machine, per year. A hundred machine that

- 1 result in a million dollars just in filter
- 2 replacement cost itself. Those numbers that
- 3 Larry used were from quotations and from real
- 4 experiences.
- 5 MS. SANDRA WESDOCK: Have you
- 6 submitted that for the record?
- 7 MR. TED SARTAIN: Well, Larry's
- 8 comments contained --
- 9 MR. LARRY JORDAN: Quotations I made
- 10 is --
- 11 MR. TED SARTAIN: -- contain those
- 12 numbers, but we can submit further information
- 13 with the quotation in our post-hearing
- 14 comments.
- MS. SANDRA WESDOCK: And could we
- 16 have copies of your testimony, today's
- 17 testimony?
- 18 MR. RONALD FORD: I think what we're
- 19 trying -- or at least I'd like to see possibly
- 20 is: You quoted the numbers 36, -46,000, can we
- 21 get the derivations that arrives to those
- 22 numbers, as written out like on a piece of

- 1 us.
- 2 MR. TED SARTAIN: Yes, sir.
- 3 MR. RONALD FORD: I'd like to talk a
- 4 little bit about those numbers now. And I
- 5 guess most of my questions might go to Mr.
- 6 Gordan (sic), but anybody can answer them. Mr.
- 7 Jordan, excuse me. The 36,000 per unit for the
- 8 inby -- and again the 46,000 per unit for the
- 9 outby, that's an average cost for the machine?
- 10 MR. LARRY JORDAN: Pretty much so.
- 11 We've got part of that information was from
- 12 Norbert Paas' information that he had given is
- 13 that retrofit each piece of equipment, the
- 14 biggest part.
- MR. TED SARTAIN: The 64,000 came
- 16 from a quotation we received this week from a
- vendor that we do business with on locomotives,
- 18 and that was a cost estimate or a quotation, if
- 19 you will, on what he sees the cost associated
- 20 with adding a DST System to a locomotive, which
- 21 would include an engine change and a major
- 22 frame modification.

- 1 we've already looked into what it would take to
- 2 give them that such device on our equipment.
- 3 MR. RONALD FORD: That would answer
- 4 some of the questions I have coming up. Let's
- 5 go back a little bit. The 36,000, that's the
- 6 cost of purchasing the --
- 7 MR. TED SARTAIN: That's a quotation
- 8 for an installed DST System or retrofit on a
- 9 existing 4110 ramcar.
- 10 MR. RONALD FORD: That includes not
- 11 only the purchase price of the equipment, but
- 12 also any frame modification and instillation
- 13 cost.
- MR. TED SARTAIN: That's correct.
- 15 MR. RONALD FORD: Does anything else
- 16 have to be put on that machine besides the
- 17 filter. I mean, you have to modify the frame,
- 18 but can you tell about 36,000? Do you have to
- 19 redo the radiator or --
- 20 MR. LARRY JORDAN: Yes. The radiator
- 21 will have to be changed and also there are some
- 22 safety shut-down systems that would have to be

- 1 system out as it's being used. Another thing
- 2 that will have to be put on there is an attempt
- 3 shut-down device that be required, and there
- 4 would be some changes in some of the other
- 5 safety shut-down systems on the equipment, as
- 6 what we are using right now is what we would
- 7 have to go to.
- 8 MR. RONALD FORD: Okay. So, my
- 9 understanding is that for the 36,000 that would
- 10 have to be done is the radiator change, safety
- 11 system shut-down systems, frame modification,
- 12 and the DST filter; and no change to the engine
- 13 or nothing to the engine.
- MR. LARRY JORDAN: Well, on the
- 15 intake and exhaust manifold would also have to
- 16 be changed.
- 17 MR. RONALD FORD: Okay. Let's go to
- 18 \$46,000, again that's an average price per unit
- 19 per outby piece of equipment.
- MR. TED SARTAIN: It's 64.
- 21 MR. RONALD FORD: I'm sorry. It's
- 22 64.

- 1 MR. RONALD FORD: And as Mr. Sartain
- 2 said, I guess, the 64,000 is related to fitting
- 3 a locomotive with a DST System, and again some
- 4 changes to the engine and frame modification.
- 5 MR. TED SARTAIN: That's correct.
- 6 MR. RONALD FORD: Now, that's a
- 7 heavy-duty piece type of equipment. Right?
- 8 MR. TED SARTAIN: Yes, sir.
- 9 MR. RONALD FORD: Let's first stick
- 10 with that first of that. Does anything else
- 11 have to be done that encompasses that \$64,000
- 12 besides what I just mentioned?
- 13 MR. TED SARTAIN: If I recall
- 14 correctly the quotation included all the
- 15 necessary changes required to accommodate the
- 16 DST System. I'm not at this point familiar
- 17 with all the details that would be required,
- 18 but we can provide that with the quotation
- 19 information in our subsequent comment.
- MR. RONALD FORD: And again, we're
- 21 talking about purchasing of the equipment and
- 22 installing it?

- 1 MR. RONALD FORD: Now, I'm just a
- 2 little bit confused here in that the 64,000 was
- 3 per unit outby price, which is average, which I
- 4 thought would encompass heavy duty -- and I
- 5 guess I thought maybe light duty, but you're
- 6 talking about heavy duty --
- 7 MR. TED SARTAIN: We're talking about
- 8 what in relationship to the proposal.
- 9 MR. RONALD FORD: I want to ask some
- 10 questions about the \$10,000, which Mr. Sartain
- 11 has already entered some of that. Again that
- 12 \$10,000 is the maintenance cost of the DST
- 13 System for one year on one machine.
- 14 MR. TED SARTAIN: That's estimated
- 15 cost for the filters alone; does not include
- 16 labor. It's based on three shifts per filter.
- 17 MR. RONALD FORD: Right, right. But
- 18 based on changing of the filter --
- 19 MR. TED SARTAIN: It's somewhere
- 20 between 30 and -40 dollars per filter at a
- 21 frequency of three shifts per filter. What's
- 22 disturbing is, we're hearing that the filter

23 life could be reduced to possibly one shift per

- 1 filter, which would triple that cost.
- 2 MR. RONALD FORD: I understand.
- 3 You're saying that 10,000 is based on the three
- 4 shifts.
- 5 MR. TED SARTAIN: Yes, sir.
- 6 MR. RONALD FORD: And 30 to 40
- 7 dollars cost per filter.
- 8 MR. TED SARTAIN: Yes, sir.
- 9 MR. RONALD FORD: And it does not
- 10 include the labor to change that filter.
- 11 MR. TED SARTAIN: Right.
- 12 MR. RONALD FORD: That doesn't matter
- whether it's inby or outby piece of equipment;
- 14 it's the same \$10,000.
- MR. TED SARTAIN: Correct.
- MR. RONALD FORD: You mentioned early
- 17 -- I don't know if you can answer this question
- 18 -- but you mentioned earlier that the cost of
- 19 the 5.6 million that's all four mines,
- 20 equipment in all four mines. Right?
- 21 MR. TED SARTAIN: Correct.
- 22 MR. RONALD FORD: And then you

1 four mines. 2 MR. TED SARTAIN: Yes. 3 MR. RONALD FORD: Can you tell me, on 4 an average, what is the average price for a ton 5 of coal that you get when you sell that? 6 MR. TED SARTAIN: No, sir, I don't 7 that. 8 MR. RONALD FORD: Anyway you can 9 supply that? 10 MR. CHUCK STEWART: I'd have to check with my boss first. 11 12 13 (Discussion off the record.) 14 15 MR. RONALD FORD: You don't know or can you tell me what percentage of your total 16 17 revenue is related to operating, maintenance, 18 and taxes? 19 MR. CHUCK STEWART: Can you say that 20 one more time? 21 MR. RONALD FORD: What percentage of

your total revenues is related to operating,

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22

- 1 MR. CHUCK STEWART: No, not right off
- 2 the bat I can't.
- 3 MR. RONALD FORD: Can you think about
- 4 maybe supplying that information, if it's
- 5 possible to get?
- 6 MR. TED SARTAIN: Yes, we will look
- 7 into that.
- 8 MR. CHUCK STEWART: One more time, so
- 9 I can make sure I get this down exactly the way
- 10 you want it. What percent of --
- MR. RONALD FORD: What percent of
- 12 your total revenues is related to operating and
- 13 maintenance cost and taxes.
- 14 MR. CHUCK STEWART: Operating and
- 15 what?
- MR. RONALD FORD: Operating and
- 17 maintenance.
- MR. CHUCK STEWART: Thank you.
- MR. RONALD FORD: And I've just got
- 20 one last area, or just one question, I hope. I
- 21 didn't understand a little bit about when, I
- 22 think Mr. Gordan (sic), Jordan talked about the

- 1 the problem that it's a fire hazard if the
- 2 filter is not changed and it's still on the
- 3 machine?
- 4 MR. LARRY JORDAN: Yes. If any of
- 5 the safety devices were to fail, like temp
- 6 shutdown, which is required to put the filter
- 7 on. If that system fails, then there is a
- 8 potential for a fire. Now, we have to look
- 9 back at the he water-exhaust-scrubber tank that
- 10 we are using, if something happens to the flow
- 11 of water into the system, and the temp shutdown
- 12 does fail, there is a potential there for fire
- 13 hazard.
- MR. RONALD FORD: Okay. But what
- 15 we're talking -- what I'm trying to get at is
- 16 that's a problem when the filter is still on
- 17 the machine? Right?
- 18 MR. LARRY JORDAN: Yes, sir.
- 19 MR. RONALD FORD: But the way you
- 20 termed is as a "disposable" a problem with
- 21 disposal of the filter. When the filter is
- 22 actually taken off the machine, you don't have

- 1 disposing it?
- 2 MR. LARRY JORDAN: After it's taken
- 3 off the machine, there's proper handling;
- 4 that's about the only problem I foresee, you
- 5 know, in disposing the filter.
- 6 MR. RONALD FORD: Let me ask one
- 7 additional question. You have filters on the
- 8 machines now. Right?
- 9 MR. LARRY JORDAN: Intake filters.
- 10 MR. WILLIAM McKINNEY: I have one
- 11 question. I think probably Mr. Byram would
- 12 answer it. You obviously had two occupational-
- illness claims have been filed, 7001 forms have
- 14 been filled out for the two incidents that you
- 15 indicate were compensable. Have you had any
- 16 other 7001 forms filled out for any other
- 17 occupational illnesses that someone has alleged
- 18 has occurred, as a result of being exposed to
- 19 diesel particulate or diesel exhaust?
- 20 MR. DALE BYRAM: I would have to say
- 21 that's a possibility. And what we would do is
- 22 we can go back and check our records and

- 1 this particular point in time, I'm not -- I
- 2 personally am not aware of it, but that doesn't
- 3 mean there's not a potential to exist. We're
- 4 talking about four separate with four safety
- 5 supervisors that would handle those records at
- 6 each mine.
- 7 MR. WILLIAM McKINNEY: But other than
- 8 the only two compensable claims, those are the
- 9 only two that you are aware of --
- 10 MR. DALE BYRAM: That I'm aware of.
- 11 MR. WILLIAM McKINNEY: -- right now?
- MR. DALE BYRAM: Yes, sir.
- MR. BOB HANEY: Mr. Byram, you had
- 14 mentioned that you disagree with our analysis
- of 17 epidemiology studies that show an
- 16 increased risk of cancer with exposure to
- 17 diesel. Is that your opinion, or do you have
- 18 some studies that would support that?
- 19 MR. DALE BYRAM: I do not have
- 20 studies. I was using a comparison Boriac
- 21 studies from Yale University to where they made
- 22 reference to questioning the selectiveness of

- 1 statement in the proposed regs. And the
- 2 position that I'm taking on it is if we have
- 3 two recognizable groups or agencies that have
- 4 done research and they're in opposition with
- 5 each other, then further research must be done
- 6 to identify accurately what we are trying to
- 7 deal with. And then once we do that, then set
- 8 the appropriate levels.
- 9 MR. BOB HANEY: Could you provide us
- 10 information on the that Boriac study?
- 11 MR. DALE BYRAM: Certainly, yes. We
- 12 have it; we can do that. May I ask a question?
- 13 Excuse me, go ahead.
- MR. BOB HANEY: I was going to ask a
- 15 few questions to Mr. Jordan. How often do you
- 16 have to rebuild the diesel engines that you
- 17 have?
- 18 MR. LARRY JORDAN: It's dependent
- 19 upon the maintenance that the engines get.
- 20 Normally, an engine should last around 8,000
- 21 hours, which could, you know, equate to a year,
- 22 year and a half, just according to how long

- 1 maintenance that they do get.
- 2 MR. BOB HANEY: Okay. And do you
- 3 have any idea what the cost of rebuilding that
- 4 engines is?
- 5 MR. LARRY JORDAN: Rebuilding the 916
- 6 engine right now, just the engine itself, is
- 7 anywhere from 12 to -14,000, just for the
- 8 engine rebuild, not including any add-on
- 9 equipment.
- 10 MR. BOB HANEY: You had mentioned
- 11 that you have some reservations about the DST
- 12 being an unproven technology. What about the
- 13 wet scrubber with the filters, which are
- 14 commonly used in other Alabama mines?
- MR. LARRY JORDAN: Ask that question
- 16 again, if you would, please.
- 17 MR. BOB HANEY: You had stated some
- 18 reservations about the DST System being an
- 19 unproven technology. What are your feelings
- 20 about using the wet scrubber systems with
- 21 filters that are currently being used in other
- 22 Alabama mines?

- 1 back at the statement that, I believe, the guy
- 2 made from T&M that the manufactures did claim
- 3 about 20 hours of usage for that particular
- 4 filter. Realistically, if you look at it, it's
- 5 boiling down to around eight hours of use
- 6 that's about all you get before it really
- 7 starts choking the machine off and you start
- 8 having problems.
- 9 So, instead of getting three-shift
- 10 use out of it, you're looking at one shift,
- 11 which in turn equates to down in equipment and
- 12 it also equates to more labor cost that would
- 13 be involved.
- So, my personal opinion that, you
- 15 know, there's probably other -- research is
- 16 being done out there that we might be able, in
- 17 the future, to look at other type of cleaning
- 18 devices that would be a lot more -- or
- 19 realistically to clean the engines.
- 20 MR. BOB HANEY: You had mentioned the
- 21 \$5 million cost for -- initial cost for all of
- 22 the engines. Typically, what time frame would

- 1 MR. LARRY JORDAN: Well, if you're
- 2 looking at approximately 100 units in an
- 3 18-month time frame, I don't really believe it
- 4 would be enough, because getting just the parts
- 5 to, you know, comply in 18 months would be -- I
- 6 think would be something that we would really
- 7 have to look into. As you well know at this
- 8 day and time, manufacturers just don't keep
- 9 components and stock parts like it used to be.
- 10 MR. BOB HANEY: I'm sorry. You
- 11 misunderstood the question.
- 12 MR. TED SARTAIN: I'm not sure we're
- 13 capable of answering. That's more of an
- 14 accounting question, and I'm not sure what time
- 15 frame that would be capitalized over.
- I know most -- I can say this: Most
- of the expenditures and things we have to
- 18 purchase to comply with the '96 health and
- 19 safety regs for diesel use were placed on cost,
- 20 they were just an up-front cost they went
- 21 directly -- they were not capitalized. And
- 22 that approached a million dollars within the

- 1 enforced.
- 2 MR. BOB HANEY: Mr. Stewart, as far
- 3 as the usage of the outby equipment, we've
- 4 heard other people say that it's used almost
- 5 regularly for the full shift. Would you
- 6 characterize it in the same way?
- 7 MR. CHUCK STEWART: No. I think
- 8 that's too general. I think there is some
- 9 equipment that transports a crew to a section,
- 10 may sit there the whole shift, as other crews
- 11 that maybe transporting supervisor and bosses
- 12 around that may run the majority of the shift.
- 13 Without some type of study, I don't think I can
- 14 give you a percentage of which units may run
- 15 full shifts, which ones don't. But I think
- 16 they have a mixture.
- 17 MR. BOB HANEY: And Mr. Sartain,
- 18 we've heard that you run between two and four
- 19 ramcars on a section at a time. Does the
- 20 airflow remain constant, or when you run four
- 21 ramcars, do you have more airflow than when you
- 22 run two ramcars?

- 1 much remains constant, but maintains that
- 2 sufficient level regardless of how many ramcars
- 3 we have. We already have in our ventilation
- 4 plan the minimum requirements for various
- 5 numbers or various scenarios of diesel
- 6 equipment operating at any given time. But
- 7 most of time that which is normally provided
- 8 for the purpose of diluting methane in a face
- 9 will accommodate three or four ramcars
- 10 operating simultaneously.
- 11 MR. JON KOGUT: Just a follow-up
- 12 question to what you just said. You said there
- 13 was a sufficient amount of air in your
- 14 ventilation plan to dilute up to four ramcars.
- 15 When you say "sufficient" can you explain?
- MR. TED SARTAIN: The gas --
- 17 MR. JON KOGUT: The gas hits --
- 18 MR. TED SARTAIN: -- hits the
- 19 emission's requirement to the current safety.
- 20 MR. JON KOGUT: Can you give us some
- 21 idea what that would bring the particulate
- 22 emissions down to?

- 1 MR. THOMAS TOMB: I have a follow-up
- 2 question on that also. I think Mr. Stewart,
- 3 you said that your mine gets 50,000 CFM, the
- 4 last crosscut?
- 5 MR. CHUCK STEWART: That was the
- 6 average for the Number 7 Mine.
- 7 MR. THOMAS TOMB: Yes, okay. Because
- 8 other comments today implied that for other
- 9 mines, it might be less than, like 20,000. Is
- 10 that --
- 11 MR. CHUCK STEWART: I can speak for
- 12 Number 7.
- 13 MR. THOMAS TOMB: Your comments were
- only for number 7.
- MR. CHUCK STEWART: Yes, sir.
- MR. THOMAS TOMB: Any other
- 17 questions?
- 18 MR. GEORGE SASEEN: I think this will
- 19 go to Mr. Jordan. Sir, did you receive any
- 20 cost for upgrading or adding the filters, from
- 21 Jeffrey, on adding filters to current fleet of
- 22 4110 ramcars?

1 MR. GEORGE SASEEN: Could you supply

- 2 us with those cost?
- 3 MR. LARRY JORDAN: I believe the cost
- 4 was approximately \$5,500 per unit, and that's
- 5 not including labor, that's just the cost of
- 6 add-on equipment.
- 7 MR. GEORGE SASEEN: Could you, maybe,
- 8 possibly estimate or supplies us, you know,
- 9 what the labor cost would be?
- 10 MR. LARRY JORDAN: Yes, sir.
- MR. GEORGE SASEEN: Thank you.
- 12 Also, Mr. Jordan, you mentioned in
- 13 your presentation, you talked with various
- 14 aftertreatment manufacturers, and you got kind
- of a range of current technology from 60 to 80
- 16 percent filtration. Could you share that data
- 17 with us from those manufacturers?
- 18 MR. LARRY JORDAN: Yes, sir.
- MR. GEORGE SASEEN: Okay. Thank you.
- 20 MR. THOMAS TOMB: Any other
- 21 questions? Do you need any clarifications on
- 22 the things that we asked for?

- 1 don't mind.
- 2 MR. THOMAS TOMB: Okay.
- 3 MR. TED SARTAIN: Since we found out
- 4 we can ask questions.
- 5 MR. CHUCK STEWART: I learned a lot
- 6 from Hacksaw while ago.
- 7 MR. THOMAS TOMB: Just remember, the
- 8 seventh time, you come up on the panel.
- 9 MR. DALE BYRAM: If I understand you,
- 10 sir, correctly, you said that the state of
- 11 California had a made a final decision, saying
- 12 that diesel particulate, in reference, to
- 13 diesel particulate that there was no safe
- 14 exposure level?
- MR. JON KOGUT: They didn't make that
- 16 -- no, I'm sorry I may have misstated. That
- 17 they didn't make an explicit statement to that
- 18 effect. What they did was adopt an exposure
- 19 response curve. So, they based their
- 20 conclusion that diesel was a toxic air
- 21 contaminant on a dose response that included no
- 22 threshold.

1 research is being reviewed by the Secretary of

- 2 Health and Human Services.
- 3 MR. JON KOGUT: I don't know that
- 4 it's the same research. It's the U.S.
- 5 Secretary of Health and Human Services. The
- 6 listing as a toxic air contaminant was the --
- 7 excuse me -- state of California Environmental
- 8 Protection Agency in the state of California.
- 9 So that's an independent determination.
- 10 MR. DALE BYRAM: Okay.
- 11 MR. TED SARTAIN: Is that information
- 12 published to where we can --
- MR. THOMAS TOMB: You can get that --
- 14 MR. TED SARTAIN: Is it on your
- 15 website?
- 16 MR. THOMAS TOMB: -- on the website.
- 17 Yes. It's under --
- 18 MR. GEORGE SASEEN: Diesel net has
- 19 some information.
- 20 MR. THOMAS TOMB: Diesel net also has
- 21 some information on that.
- MR. TED SARTAIN: I think we are

- 1 MR. THOMAS TOMB: Thank you
- 2 gentlemen. And really the information if you
- 3 could supply to us what we asked for -- this
- 4 is all things that are going to be used in
- 5 consideration of the rule.
- 6 MR. CHUCK STEWART: Can I make one
- 7 file statement?
- 8 MR. THOMAS TOMB: Sure.
- 9 MR. CHUCK STEWART: And there's been
- 10 a lot of questions and that's the purpose of
- 11 these and I appreciate that. This is for
- 12 clarification for both sides. You know, I've
- 13 got to employees here, and I want to make sure
- 14 they understand where our position is. You
- 15 know, we're not coming in here today and saying
- 16 that exposure to DPM is safe. We question
- 17 "What is a safe level." We've questioned
- 18 whether there is systems out there that provide
- 19 95 percent reduction that would meet the
- 20 regulations. And we question whether there are
- 21 not other tools that can be used once a safe
- 22 level is determined to achieve those rates.

- 1 for your comments.
- I know it's sort of late and running
- 3 into our lunch time here, but we have three
- 4 more presenters that look like -- that the time
- 5 should not run us too much longer. So, what I
- 6 propose is to go ahead and have these three
- 7 people make their presentation before we take a
- 8 lunch break.
- 9 Our next presenter will be Mr. Patts:
- 10 MR. Larry Patts: Thank you Mr.
- 11 Chairman, ladies and gentlemen of the panel.
- 12 My name is Larry Patts, P-a-t-t-s, and I'm a
- 13 representative of Consol, Incorporated.
- 14 Consol believes in the use of
- 15 diesel-powered equipment in underground mines
- 16 must be encouraged. After a thorough analysis
- in several states, we conclude safety can be
- 18 enhanced by using diesel-powered equipment
- 19 underground without introducing a new health
- 20 hazard for our employees.
- In very large underground mines,
- 22 where coal is transported by conveyer belt, the

1 personnel and supplies is diesel. It is our

- 2 opinion the introduction of diesel-powered
- 3 equipment has been a significant contributor
- 4 to the improvement and safety performance in
- 5 underground coal mining during past decade.
- 6 Since 1972, 18 Consol employees have
- 7 died, as a direct result of the exposed
- 8 overhead direct current trolly line. There
- 9 have been many other fatalities and serious
- 10 accidents in the American coal industry similar
- 11 to Consol's.
- 12 The use of diesel equipment -- and I
- 13 mean here: locomotives, mantrips and jeeps
- 14 eliminates the trolly wire and the trolly pole.
- 15 If diesel had been used, all of the 18-Consol
- 16 fatalities could have been eliminated.
- 17 The use of diesel shuttle cars
- 18 eliminates the trailing cables, as a result,
- 19 the tripping hazards and the injuries caused
- 20 from struck by the cable can be eliminated,
- 21 along with the electrical accidents and fires
- 22 caused by the cable.

- 1 as trolly poles and trailing cables contribute
- 2 to a number of injuries, where the cause is
- 3 nonelectrical. For example, injuries have been
- 4 caused when the trolly pole became and
- 5 disengaged from the wire and struck the
- 6 operator. Even more serious were the fires and
- 7 ignitions, which have been caused by electrical
- 8 equipment.
- 9 Consol experienced such an incident
- in 1972, when a carrier moving equipment in the
- 11 mine came in contact with the trolly wire, a
- 12 fire resulted and nine men lost their lives.
- 13 As just one example of the potential
- 14 for fire from the trolly wire, a major
- 15 southwestern Pennsylvania coal mine experienced
- 16 at least three fires from the trolly wire; two
- 17 of which caused the mine to be shutdown for
- 18 substantial periods of time, at great economic
- 19 loss to the community.
- 20 Another example is from southwestern
- 21 Virginia, where a part of the trolly wire
- 22 ignited gas from an underground pipeline. Now,

23 fortunately no fatalities in this incident, but

1 the mine was closed, resulting in a loss of

- 2 jobs and economic hardship.
- 3 Battery-powered equipment is used in
- 4 many mines for the transportation of men and
- 5 supplies, and as scoops for cleanup work and
- 6 miscellaneous jobs. Battery equipment like
- 7 diesel equipment can eliminate the trolly wire
- 8 and the trailing cables. However, battery
- 9 equipment also has well-known hazards, which
- 10 have caused numerous injuries. Batteries
- 11 produce hydrogen gas, which have caused
- 12 explosions underground, sparks from batteries
- 13 have also caused methane ignitions underground,
- 14 such as the Schocia (phonetic) Mine disaster.
- 15 Other injuries have been the result with
- 16 battery acid and the physical handling of
- 17 batteries.
- 18 Diesel equipment does have the
- 19 potential to significantly reduce injuries by
- 20 eliminating electrical components, such as the
- 21 trolly wire, the trolly pole, and trailing
- 22 cables.

1 about the potential hazards created by diesel

- 2 equipment. Many of these concerns have
- 3 resulted from a lack of knowledge about the
- 4 design and the operation of diesel.
- 5 The items most frequently mentioned
- 6 is the possible increase in fire hazard and
- 7 ignition hazard, resulting from hot exhaust
- 8 gases and hot services. Strict MSHA and State
- 9 regulation guard against potential fires in the
- 10 face and outby areas of the coal mine.
- In the face area, the equipment is
- 12 designed to pull the diesel exhaust and then
- 13 quickly dilute it with air. Potentially hot
- 14 surfaces, such as the exhaust manifold and the
- 15 exhaust pipe are fully water jacketed in order
- 16 to prevent the emission of coal dust or diesel
- 17 fuel.
- Rigid permissibility tests are also
- 19 required by MSHA approval. As with face
- 20 equipment, MSHA and State regulations also
- 21 govern the use of outby diesel-haulage
- 22 equipment.

- 1 equipment, which does not have to pass
- 2 explosion tests or eliminate hot surfaces,
- 3 regulations for diesel outby haulage equipment
- 4 are not as stringent as those for face
- 5 equipment.
- 6 MSHA has recently promulgated even
- 7 more comprehensive safety regulation for the
- 8 design, approval, and use of diesel equipment
- 9 in underground coal mines. And by this
- 10 reference, I mean the October 1996 regulations.
- 11 Fuel storage and handling is another
- 12 concern with diesel equipment. MSHA, in its
- 13 latest diesel regulations, provide stringent
- 14 standards for fuel storage and handling. Many
- of the standards are already enforced by state
- 16 agencies where diesels are used. Most of the
- 17 regulations are simply normal precautions one
- 18 would take when handling flammable hydraulic
- 19 oil.
- 20 Underground fuel storage units must
- 21 be well ventilated to prevent leaks. The units
- 22 must be kept in well-ventilated locations with

23 the air not allowed to pass through the active

- 1 ways.
- 2 The charging stations for battery
- 3 powered also require such ventilation. The
- 4 fire protection must also be supplied at
- 5 refueling points, as well as incombustible
- 6 material for absorbing spilled fuel.
- 7 Personnel must be trained in
- 8 refueling and storage procedures, and only
- 9 those qualified personnel allowed to perform
- 10 such active.
- 11 The National Institute of
- 12 Occupational Safety and Health has determined
- 13 diesel particulate matter to be potential human
- 14 carcinogen. Recent studies have established
- 15 causal relationships between long-term
- 16 relatively high-concentration exposure to DPM
- 17 and lung tumors in rats, and a slight infer
- 18 increased risk to the development of lung
- 19 tumors in humans.
- 20 Present State and Federal regulatory
- 21 agencies are proved ventilation and equipment
- 22 maintenance plans are in place to prevent such

23 high concentration exposures in underground

- 1 coal mines.
- 2 The use of diesel outby-haulage
- 3 equipment can improve mine ventilation. In
- 4 mines using trolly wire, the significant
- 5 ventilation problems have been associated with
- 6 required isolated intake, escapeway and
- 7 regulated track entry.
- 8 The final results are man-made
- 9 restrictions on both the isolated intake and
- 10 track air courses, to insure positive air
- 11 movement to the face areas.
- 12 Typically, in mines where track air
- 13 velocities are limited by MSHA regulations to
- 14 250 feet per minute. Air tends to flow up the
- 15 isolated intake and reverses into the track
- 16 entry. To prevent this occurrence, the
- isolated escapeway, as well the track, must be
- 18 regulate.
- 19 However, with the diesel system --
- 20 and with this situation, all intake air is
- 21 restricted and the overall ventilation is,
- 22 therefore, reduced.

- 1 restrictions caused by entry isolation can be
- 2 removed and the intake air would be completely
- 3 unrestricted. The result is a more overall or
- 4 positive air flow to the working faces.
- 5 This also provides for better shaft
- 6 utilization.
- 7 In summary, the safety advantages
- 8 brought about by diesel equipment, definitely
- 9 outweigh the possible disadvantages. Hot
- 10 surfaces, exhaust, and other possible emission
- 11 sources are controlled by MSHA regulations and
- 12 rigid permissibility tests.
- Fuel storage and handling require
- 14 care and training. However, normally
- 15 precautions associated with flammable hydraulic
- 16 oil are sufficient to prevent such hazards and
- 17 spillage and fires.
- 18 Diesel equipment does have the
- 19 potential to significantly reduce injuries.
- 20 Many injuries are related to electrical
- 21 components, as I mentioned the trolly wire, the
- 22 trolly pole. They can eliminated with diesel

23 locomotives, personnel carries, and shuttle

- 1 bus.
- 2 Elimination of the trolly wire also
- 3 improves the overall mine ventilation providing
- 4 a highly significant advantage in -- system.
- 5 This should never be underestimated. Console
- 6 believes that introduction of diesel equipment
- 7 into coal mines has been a significant
- 8 contributor to improvement in safety
- 9 performance in American underground coal mines
- 10 during the last decade.
- 11 Consol also believes that the
- 12 expanded use of diesel equipment will continue
- 13 to improve the safety performance of
- 14 underground coal mines in the future. We
- 15 believe that MSHA's proposed regulation to
- 16 require 95 percent efficiency for DPM on all
- 17 permissible and heavy-duty nonpermissible
- 18 diesel equipment is unwarranted and
- 19 impractical.
- 20 Recent laboratory testing are
- 21 currently available, DPM filter confirm that 95
- 22 percent filter efficiency is not practically

1 approach to control exposure to diesel exhaust,

- 2 using low-emission engines, low-sulfur fuels,
- 3 catalytic converters, diesel engine maintenance
- 4 programs, and ventilation.
- 5 MSHA has also proposed this method to
- 6 reduce exposure to diesel exhaust in their
- 7 Toolbox approach. However, if filters are
- 8 mandated, the incentive to lower exposure,
- 9 using such tools is eliminated. Under the
- 10 present MSHA proposal, the Toolbox contains
- 11 only one tool, and that is after-treatment
- 12 devices.
- During the past decade Consol has
- 14 proven that diesel equipment in underground
- 15 coal mines can be operated without sacrificing
- 16 miners' health while improving their safety.
- 17 State as well as Federal regulations governing
- 18 the approval and use of such diesel equipment
- 19 have proven adequate to insure safe and
- 20 healthful use by responsible operators.
- 21 Additional requirements imposed on the
- 22 use of diesel will discourage the use of diesel

23 equipment and will promote the use of trolly

1 equipment, which has in the past proven less

- 2 safe to our employees.
- I'd like to thank you for the
- 4 opportunity to speak this morning. Thank you.
- 5 MR. THOMAS TOMB: Thank you.
- 6 MR. BOB HANEY: Mr. Patts, do you
- 7 know of any inference by the engine
- 8 manufacturers to produce a lower emission
- 9 permissible engine?
- 10 MR. LARRY PATTS: I know for a fact
- 11 that it is difficult for -- with a quantity of
- 12 engines that are used for the engine
- 13 manufacturers to get approval on even lower
- 14 emissions engines. I don't of any specific
- 15 efforts going on right now to produce lower
- 16 emission engines.
- MR. GEORGE SASEEN: Mr. Patts, do you
- 18 have any -- you mentioned 95 percent was, in
- 19 your opinion, from data, unachievable. Do you
- 20 have a range of filter efficiency that could be
- 21 supported by data that could be achievable?
- 22 MR. LARRY PATTS: I believe the data

23 that was submitted and the work was done at the

- 1 West Virginia University will show a range of
- 2 filter efficiency probably between 70 and 80
- 3 percent.
- 4 MR. GEORGE SASEEN: Thank you.
- 5 MR. THOMAS TOMB: Okay, thank you
- 6 very much.
- 7 Our next representor will be Dr.
- 8 Pramod Thakur:
- 9 DR. PRAMOD THAKUR: My name is Pramod
- 10 Thakur. I have a bad throat. I gave you may
- 11 card, so you can read from my card what my name
- 12 is.
- I just wanted to offer a few
- 14 gratifications. I want to thank the gentlemen
- 15 and the committee to let me attend all these
- 16 four hearings and speak whenever I wanted to
- 17 highlight something.
- I have heard on these four meetings
- 19 how people have suffered from the diesel
- 20 exhaust. And if I enlighten all that I heard
- 21 properly; I hear two problems: Instantaneous
- 22 problems, like watering of eyes, irritation in

23 the throat, headache, and things like that.

- 1 And it had often been mentioned that we could
- 2 do something to eliminate these symptoms.
- I would like to offer to the
- 4 Committee that all these symptoms are related
- 5 to the gasses components of the diesel exhaust,
- 6 and in all probability DPM has nothing to do
- 7 with it. This is not to say that this would be
- 8 complacent about the longer-term health factor
- 9 about the particulates in the diesel, but I
- 10 would just like to clarify. And it also helps
- 11 us in planning our new strategy: How do we
- 12 make diesel engines helpful and safe in our
- 13 mines.
- 14 Picking up on what Larry said, you
- 15 know, I think there is no question in the
- 16 mines, in labor, or industry that this is a
- 17 safer piece of equipment for our underground
- 18 mines, particularly in gassy mines. So, how do
- 19 we tackle this problem? We buildup on what I
- 20 submitted to you in Beckley. I'd like to say
- 21 that solution lies not so much in installing a
- 22 filter on every piece of diesel equipment and

23 installing a well-designed oxidation catalyst

- 1 or catalyst converter. And the reason I say so
- 2 -- because I have talked and I have seen with
- 3 results for a year and a half at -- and
- 4 Commissioner of West Virginia Coal Commission
- 5 in West Virginia. I have seen the opportunity
- 6 to look at firsthand. results
- 7 I am very interested, Mr. Chairman
- 8 and members of the committee, with the
- 9 performance of the oxidation catalytic. For
- 10 example, it takes out 90 percent of carbon
- 11 monoxide, 95 percent of unburned hydrocarbons,
- 12 which gives you watering eyes, irritation in
- 13 the throat. Perhaps the most important thing
- 14 it does -- analyze it, but the carbon factor on
- 15 which you get some chemicals called polynuclear
- 16 hydrocarbons. Coal particle is no more
- 17 dangerous -- or soot particle is not more
- 18 dangerous than the coal dust, but the potential
- 19 for damaging human beings is a lot more fragile
- 20 vapors classified as class 32 SPAH. Wouldn't
- 21 you be happy to know that his oxidation
- 22 catalyst will burn 95 percent PAH and convert

23 it into water, a harmless CO2.

- 1 Now, the current results that I have,
- 2 it reduces 25 to 35 percent of the particulate.
- 3 And I cannot tell how much of carbon and how
- 4 much of this SOF, which soluble -- containing
- 5 all the harmful ingredients, but it does -- if
- 6 you follow the trend, I think it does remove
- 7 most of the things which are immediately
- 8 harmful to people and that will hurt people in
- 9 long range.
- 10 And in the same breath, I'd like to
- 11 add, we're not quite done with the development
- 12 of oxidation catalyst; some of the
- 13 manufacturers' name we heard like Johnson
- 14 Matthey, Engelhard. We're working to enhance
- 15 the performance of this. But I just want to
- 16 offer my recommendations that to all of them
- 17 asking for a filter for every single unit, we
- 18 should be asking for an oxidation catalyst,
- 19 which will do whole lot more good than a fuel
- 20 duct 10. From practical experience I can tell
- 21 you, you install that DST filter on a unit and
- 22 you don't have an oxidation catalyst, you're

- 1 stood by the engine, I've had my experience
- 2 directly; I didn't read any book. And this is
- 3 again really emphasizing the things I said.
- 4 The second thing I would like to
- 5 submit to, and it's not enough to criticize,
- 6 but I think it will offer some solution as
- 7 well. I'd like to reemphasize at that point
- 8 and time when we don't have an instrument to
- 9 distinguish the coal dust, like somebody was
- 10 asking, and DPM in the mines. Perhaps to best
- 11 maintain uniformity and some degree of control
- 12 throughout the Nation, and, of course, in the
- individual states, would be to accept the
- 14 proposal prepared by the West Virginia Vehicle
- 15 (phonetic) Equipment Commission, take the
- 16 integrated approach, use the cleanest engine --
- 17 you ask, How clean the engine is? Right now if
- 18 you go into the market, a very small consumer
- 19 -- the way you define a clean engine is the
- 20 specific DHPR. The number from data from
- 21 Georgia Lab is .2 and .3 that's all we can get,
- 22 for haulage engine you can .1, but we cannot

- 1 would go and develop such engines. That's what
- 2 this Deutz 916 engine, very clean -- I'm sorry.
- 3 916 MWM, was bought by Deutz. They manufacture
- 4 6,000 they sell only 60, so what they did, they
- 5 stop manufacturing anymore.
- 6 How do you go about it? It's just
- 7 like they say, You can't hire a person without
- 8 experience, then how do you get experience
- 9 unless you get hired.
- 10 If you open up the door and we start
- 11 using things like Jim Walter is doing and other
- 12 areas of the country, where we have gassy mines
- 13 or we have concerns for adjustments. Then at
- 14 one stage we may have enough -- to go
- 15 collectively and say, Okay, we're going to buy
- 16 five haulage units and give us engines that's
- 17 maybe .1 gram.
- 18 So, I submit to you to help us like
- 19 U.S. Army helps those people that don't have
- any experience.
- 21 My throat is dry; you'll have to bare
- 22 with me. Like I say, just to complete the

23 thought, I said, that the best way to certify

- 1 the diesel equipment would be to start with
- 2 clean engine, and use the oxidation catalyst in
- 3 different part of the equipment, and then
- 4 specify sufficient amount of air, when you can
- 5 provide that and anybody in the mine violation,
- 6 and many of sitting there, I know that for a
- 7 long time; nobody has to tell you, you already
- 8 know that what you have, you don't have enough
- 9 air. If you don't enough air, you have no
- 10 recourse, but to use a filter; like heavy-duty
- 11 equipment, outby and inby equipment.
- 12 And I think in West Virginia -- and I
- 13 can be corrected by Jeff here -- an industry,
- both to accept this outline of this approach,
- 15 this protocol. The only difference is: We are
- 16 saying .5, and somebody is asking for .1 and
- 17 .2. And my answer to that is that I try to
- 18 investigate: Can we achieve .1 and 2? There
- 19 are only two ways you can get .1 and 2. If you
- 20 have commercially available system that could
- 21 give you 95 percent plus, you could, or if you
- 22 had engines with a very low emission, less

- 1 knowledge, or last year and a half effort
- 2 indicate that we don't have such engines; we
- 3 don't have such engines. So, we have to have a
- 4 number we can live with, which is technically
- 5 crucial.
- I would again say that we should
- 7 leave the door open. We should immediately
- 8 remove this trolly wire hazard by introducing
- 9 diesel. And we should leave the door open for
- 10 improvement in all areas, as a large buyer
- 11 industry that we can negotiate with
- 12 manufacturers to get cleaner engines. We
- 13 should encourage the research in blending with
- 14 -- other sources like FT, or ultralow sulfur
- 15 fuel. And study their impact on engine life,
- 16 because if you reduce the sulfur to almost
- 17 nothing, engine life is obtained.
- So, we should ask manufacturers to
- 19 recommend to us the right equipment here, which
- 20 would minimize the use of DPM and yet will
- 21 expand the life of the engine.
- To repeat again: We should continue

- 1 catalyst. It's just a nice thing -- I cannot
- 2 overemphasize the importance of this.
- 3 And last, but not the least, I think
- 4 in some cases we will need certain filters.
- 5 The ones we have right now, they are not ideal.
- 6 DST, for example, is too large for small
- 7 equipment, neither does it delivers to promise
- 8 95 percent in all cases.
- 9 Filters can be improved too. So, Tom
- 10 I will address it to -- if MSHA has fundings,
- 11 you should it encourage in this area -- this
- 12 may seem out of line, but I strongly feel that
- 13 there is room for improvement and some day we
- 14 can have a system we can all be happy with.
- Thank you again for giving me the
- 16 opportunity.
- 17 MR. THOMAS TOMB: Thank you Dr.
- 18 Thakur. Any questions.
- MR. GEORGE SASEEN. Dr. Thakur,
- 20 refresh memory, but the catalyst converter
- 21 studies done at WVU, was that submitted in
- 22 Beckley? Is that all --

- 1 MR. GEORGE SASEEN: -- part of that?
- DR. PRAMOD THAKUR: Yes, it's in the
- 3 record. Twenty-five to 35 percent, but there
- 4 are other -- and you know me, I don't trust
- 5 anybody. I like to have -- well, like anybody
- 6 else, I like to have duplicates. You have one
- 7 data form and apply the law on the basis of
- 8 that. I want to have several repetitions.
- 9 MR. THOMAS TOMB: Any other
- 10 questions?
- 11 MR. JON KOGUT: Dr. Thakur, you said
- 12 that in your opinion that the acute effects of
- 13 diesel exhaust -- and I think you singled out
- 14 or you mentioned specifically eye irritation --
- DR. PRAMOD THAKUR: Yes.
- 16 MR. JON KOGUT: -- were attributable
- 17 to the gaseous component rather than the
- 18 particulate.
- DR. PRAMOD THAKUR: Yes.
- 20 MR. JON KOGUT: Were you referring to
- 21 all of the acute responses that have that we
- 22 discussed in the risk assessment, or are you

23 referring specifically to eye irritation.

- DR. PRAMOD THAKUR: Well, Jon, you
- 2 know I'm not a medical doctor, so don't ask me
- 3 difficult questions. The symptoms -- I've been
- 4 in the mines for 30 years and I have seen a lot
- of problems. I would -- it's my best judgment
- 6 that all the acute problems like eye
- 7 irritation, throat irritations, possible
- 8 headaches, you know, is probably gaseous
- 9 components. I have exposure to CO, NO enough
- 10 that I don't like to see that. I have seen
- 11 people dying out of CO and NO2. I base my
- 12 judgment on that.
- 13 As far as DPM is concerned, yes, it
- 14 is no different from coal dust. So, that's
- 15 your chronic problem. And like many members
- 16 said here, we certainly would like to know some
- 17 day what is a safe level. Right now my
- 18 position is -- or in at least in West Virginia
- 19 is that minimize particulate to the minimum, we
- 20 can minimize.
- 21 MR. JON KOGUT: Okay. Well, in
- 22 response to that, you know, your opinion about

- 1 that there is body of evidence that relates
- 2 diesel particulates specifically to acute
- 3 responses. And I'm just going to quote a
- 4 sentence out of the proposed rule. It appears
- 5 on page 17530 of the Federal Register Notice.
- 6 It says that "There have been a number of
- 7 recent studies indicating that DPM exposures
- 8 can induce bronchial inflammation and
- 9 respiratory immunological allergic responses in
- 10 humans. These are reviewed in Perterson and
- 11 Saxon, in 1996, and Diaz-Sanchex, 1997."
- DR. PRAMOD THAKUR: I'm not aware of
- 13 it. I'm just speaking from practical
- 14 experience in the mines.
- MR. THOMAS TOMB: I have one
- 16 question. In your recommendation for diesel
- 17 catalyst converters, there's a presentation
- 18 made in Beckley by, I think, a Mr. Smith, that
- 19 questioned that application because of the
- 20 operating temperature in the engines in a lot
- 21 of the places in the mines?
- DR. PRAMOD THAKUR: Mr. Chairman

- 1 technology, you can suspect some personal
- 2 bias. Mr. Smith makes a system where they
- 3 don't have oxidation catalyst as compared to
- 4 DST. They sell that equipment without the
- 5 benefit of oxidation catalyst, simply because
- 6 they cannot provide, they cannot refute the
- 7 scientific data -- that tremendous job -- what
- 8 did you say? Gaseous toxic agents in the
- 9 diesel exhaust.
- 10 MR. THOMAS TOMB: Okay. Thank you.
- DR. PRAMOD THAKUR: Thank you again.
- MR. THOMAS TOMB: Our next presenter
- 13 will be Mr. Cauvle?
- MR. MIKE CAUVLE: Yes, sir. My name
- is Mike Cauvle, M-i-k-e C-a-u-v-l-e. I'm the
- 16 UMWA member on the safety committee for U.S.
- 17 Steel Mining, with 30 years experience.
- 18 Okay. I work at Concord preparation
- 19 plant, which is not covered under this law.
- 20 Inside our plant we have forklifts and Bobcats,
- 21 which are diesel, with no scrubbers; we don't
- 22 make no test and no test is required. We have

23 three bulldozers, two front-end loaders that

1 puts out exhaust, depending on the location of

- 2 equipment and the wind comes through the
- 3 windows and the doors and all. I personally
- 4 work at the thermodryer, where we use diesel to
- 5 spray on the coal to ignite our fire to begin
- 6 with and throughout the day, you have to add
- 7 diesel to maintain your fire.
- 8 We have in the winter time, we have
- 9 different type heaters, but we have some
- 10 heaters in our plant that's called Salamanders
- 11 (phonetic) all it is, it's just basically
- 12 diesel burning if barrel is what is amounts to,
- 13 it puts out black smoke at times.
- We add diesel to our water system
- 15 inside the plant for flotation -- I know this
- 16 is getting away from actually burning of it,
- 17 but the pumps and all makes the diesel hot.
- 18 And inside our plant at times, you have your
- 19 eyes burning, you have headaches, and shortness
- 20 of breath.
- We've had roughly 10 to 12 miners in
- 22 the last ten years that I know of come down

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1 MR. THOMAS TOMB: Ten to 12 miners in
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- 2 the last --
- 3 MR. MIKE CAUVLE: Ten years.
- 4 MR. THOMAS TOMB: -- ten years.
- 5 MR. MIKE CAUVLE: And I was just
- 6 wondering roughly what can y'all do to help the
- 7 miners that work outside on this diesel
- 8 problem.
- 9 And that's it. Thank you.
- 10 MR. THOMAS TOMB: Any questions. I
- 11 guess I have one question. All this equipment
- 12 that you talked about, your Bobcats, and so
- 13 forth, are these all operating in the open
- 14 environment?
- MR. MIKE CAUVLE: I'm sorry. What
- 16 now?
- 17 MR. THOMAS TOMB: Yes. On the
- 18 equipment that you said at your service
- 19 operation, is this equipment all operating in
- 20 open environment?
- 21 MR. MIKE CAUVLE: The rock trucks,
- the front-end loaders, and bulldozers are, but

23 the Bobcats and the forklift and all work right

1 inside the building, and elevators, you know,

- 2 lifting equipment.
- 3 MR. THOMAS TOMB: Do they have any
- 4 kind of control equipment on them?
- 5 MR. MIKE CAUVLE: Sir?
- 6 MR. THOMAS TOMB: Do they have any
- 7 kind of control equipment on them?
- 8 MR. MIKE CAUVLE: No, sir. Just like
- 9 a Bobcat or a forklift you see in a warehouse.
- 10 MR. THOMAS TOMB: There's not
- 11 converters or anything on them?
- MR. MIKE CAUVLE: No, sir, none
- 13 whatsoever.
- MR. WILLIAM McKINNEY: Approximately,
- 15 how many people work at your freight plant.
- 16 You said you had 10 to 20 cases of cancer --
- 17 MR. MIKE CAUVLE: Probably from --
- 18 MR. WILLIAM McKINNEY: -- how many
- 19 people work there?
- 20 MR. MIKE CAUVLE: Sixty-two People
- 21 work at the prep plant on three shifts. But
- 22 now some of them at this point is done retired.

23 My father had colon cancer, and he's already

- 1 retired, which that's been with the last two
- 2 years. President of our local, Mr. Ray Pate,
- 3 has had had kidney any cancer, in the last ten
- 4 years. He's here today.
- 5 I'm not saying that all of this has
- 6 to do with diesel, but when you have that many
- 7 people in that small group, you know, something
- 8 is causing it. Thank you.
- 9 MR. GEORGE SASEEN: Is maintenance on
- 10 this equipment done indoors, in the garage, or
- 11 is it done on the outside?
- MR. MIKE CAUVLE: Pretty much inside.
- 13 MR. GEORGE SASEEN: Is there anything
- 14 that -- is the exhaust emitted inside, or do
- 15 they try to pipe it to the inside?
- 16 MR. MIKE CAUVLE: It's inside.
- 17 MR. GEORGE SASEEN: It stays inside?
- 18 MR. MIKE CAUVLE: Yes, sir. And when
- 19 it's running, it's inside. When you crank it
- 20 up and you get smoke, when you moving it, they
- 21 smoke. You know because it's -- we've never
- 22 thought that much about it. You know, like I

- 1 you opened the door up awhile ago about when
- 2 you asked a question about the outside people.
- 3 And like I said, I can see where we might be
- 4 having a real problem.
- 5 MR. THOMAS TOMB: Okay. Thank you
- 6 very much. Is there anybody else at this time
- 7 that would like to make a presentation. Okay,
- 8 Mr. Duncan.
- 9 MR. JEFFREY DUNCAN: Good afternoon.
- 10 My name is Jeffrey A. Duncan. I gave you my
- 11 business card. I'm the Deputy Administrator of
- 12 the Department of Occupational Health and
- 13 Safety for United Mine Workers of America.
- I just want to touch on a few things
- 15 today. I'd like to clear up some things that
- 16 may have been misunderstood, may have been
- 17 misrepresented. But before I start, I would
- 18 like to thank this Panel for permitting me to
- 19 share my comments today, and I'd also like to
- 20 thank the Panel and the Agency for taking this
- 21 important rulemaking on.
- I will submit to the record, prior to

23 February 16th, final written comments from the

- 1 United Mine Workers. But some of the things
- 2 that I've heard here and the two other hearings
- 3 that I attended and got a report back from Mt.
- 4 Vernon here kind of left me puzzled about some
- 5 things.
- 6 I've heard mine operators say that
- 7 they would like to be given the flexibility to
- 8 use the integrated approach to control diesel
- 9 particulate exposure. They want to use one or
- 10 more of the measures contained in the MSHA
- 11 Toolbox. They want to be able to pick and
- 12 choose which of those measures that will apply.
- 13 And, you know, I've a little bit of a problem
- 14 with just a random approach.
- I think it would be very difficult to
- 16 verify and very difficult to enforce. But I
- 17 quess, the thing that puzzles me the most about
- 18 what the operators have said: They keep
- 19 saying, Give us the flexibility. My question
- 20 to the operators is: What's stopping you from
- 21 doing it right now. The Toolbox has been out
- 22 there for quite some time. Most of that stuff

- 1 Virginia, but the Toolbox has been published.
- 2 There is absolutely no regulation that
- 3 prohibits the operators from using what is in
- 4 that Toolbox right now. All those other
- 5 things. I don't think a lot of them are being
- 6 used.
- 7 As with ventilation and fuel quality
- 8 and maintenance and clean burning engines, I
- 9 don't think those things are stand-alone
- 10 methods for controlling diesel particulate
- 11 matter. And I don't think they can always be
- 12 relied on. Clean burning engines, if they're
- 13 not maintained are going to produce a lot of
- 14 diesel particulate. It will emit the higher
- 15 levels DPM. If ventilation -- and we've heard
- 16 a lot of information in the four public
- 17 hearings from mines about how we can't rely on
- 18 ventilation, and there's got to hundreds, maybe
- 19 thousands of citations that have been entered
- 20 into the record; ventilation citation.
- 21 We really can't rely on ventilation
- 22 to protect miners. If we have a series of

- 1 the intake, that can cause particulate
- 2 emissions to increase. But the one thing that
- 3 kind of serves as the catchall is that filter
- 4 that the exhaust has to pass through
- 5 immediately before it's emitted into the mine
- 6 atmosphere. Excuse me, I think I'm getting dry
- 7 like Dr. Thakur.
- 8 We do agree with the integrated
- 9 approach to control this diesel particulate
- 10 matter. But the fact of the matter is we
- 11 believe that the -- an integrated approach, a
- 12 fully integrated approach includes a
- 13 requirement for diesel particulate filters on
- 14 every piece of diesel-powered equipment. And
- 15 that's where -- and, you know, I really
- 16 appreciate everything that, you know, MSHA has
- 17 done this rulemaking. I just wish you would
- 18 have gone further. I don't think you quite got
- 19 to where you need to be. And, you know, if we
- 20 filter one-third of all diesel in underground
- 21 coal mines, and leave the other two-thirds out
- there, then we're certainly not where we need

- 1 Clearly, you've heard a lot of
- 2 testimony from miners that have talked about
- 3 maintenance being a problem. Maintenance is an
- 4 even bigger problem for outby equipment,
- 5 because there is no requirements for
- 6 permissibility test. MSHA inspectors don't
- 7 inspect outby equipment for permissibility.
- 8 And often times outby equipment -- and this
- 9 hasn't changed for 20 years. It was like this
- 10 when I first started in an underground coal
- 11 mine. Outby equipment gets operated until it
- 12 breaks, then it gets repaired.
- 13 So, we need to make sure that we're
- 14 doing something to protect miners from the
- 15 emissions coming off of those outby-diesel
- 16 engines.
- I heard Mr. Patts' comments earlier,
- 18 and he stressed the fact that diesel eliminates
- 19 trolly. I found out after the Beckley hearing,
- 20 talking to one of the miners that works at VP 8
- 21 Mine that they've had diesel-powered equipment
- in the VP 8 Mine, Consol Mine, for quite some

23 time and still have energized trolly wire. So,

- 1 it doesn't necessarily eliminate trolly. And,
- 2 I guess, that raises another safety concern of
- 3 mine when we've got diesel fuel being
- 4 transported in a mine that's got a trolly
- 5 wire. So, it isn't necessarily an either/or.
- 6 Miners have also addressed the issue of
- 7 what MSHA Considers as light duty not
- 8 permissible diesel-powered equipment. And I
- 9 could tell by the question that several of you
- 10 were real interested in this question. The
- 11 issue about how often it's run and how hard it
- 12 gets run, what kind of load it's placed under.
- 13 I think that the answer that you got from the
- 14 miners is that light-duty outby or light-duty
- 15 nonpermissible diesel-powered equipment is run
- 16 often and it's run hard.
- We really need to consider that when
- 18 you prepare the final rule. It doesn't get run
- 19 for only brief periods of time each shifts, and
- 20 it's not operated at low speed and with little
- 21 or no load.
- 22 I understand that at least one of the

23 public hearings there was an issue raised about

- 1 a Rohmac ceramic- type system, and how the type
- 2 system sat in a lab at West Virginia University
- 3 for two or three months. This was part of the
- 4 West Virginia Diesel Equipment Commission
- 5 study. My response to that is: Were real
- 6 anxious to get that thing tested. As a matter
- 7 of fact, on a few occasions, I contacted Dr.
- 8 Giedum (phonetic) myself and asked him about
- 9 the status of the test and why the engine
- 10 wasn't being tested. It was on the original
- 11 work-plan, February 1. And come to the find
- 12 out that some of the operators had been be
- 13 contact with Dr. Giedum and made adjustments to
- 14 the work-plan, they kind of pushed it back
- 15 somewhat.
- I think that Rohmac, and there maybe
- 17 some other exhaust after-treatment
- 18 manufacturers are up and coming. I think that,
- 19 you know, they're producing a good product,
- 20 that product, from what I understand, is going
- 21 to be the subject of a meeting in Pennsylvania
- 22 next Wednesday; I believe it's the 23rd. I

23 think, from what I understand is correct, that

- 1 Rohmac is going to approach the West Virginia
- 2 Diesel Technical Advisory Committee and may
- 3 even be in a position to submit something for
- 4 approval.
- 5 MR. THOMAS TOMB: West Virginia or
- 6 Pennsylvania?
- 7 MR. JEFFREY DUNCAN: Pennsylvania. I
- 8 think the meeting is Uniontown, Pennsylvania,
- 9 on the 23rd. And there's also a -- I've heard
- 10 each and everyone of these hearings that, you
- 11 know, there's only two pieces of diesel-powered
- 12 equipment in Pennsylvania, and right now that's
- 13 accurate. I'll say this first: When it comes
- 14 into Pennsylvania; it's going to come in the
- 15 right way, and we are not going to hurt minors
- 16 with it.
- 17 But I'd also like to share with you
- 18 that there's a company -- Bob Murray, I believe
- 19 the name of the operation is CRG; it's near
- 20 Black Lick, Pennsylvania. And they're in the
- 21 process right now of getting a DST-equipped MWM
- 22 Deutz ready for approval in Pennsylvania. And

- 1 probably employees about 30 or 40 miners, maybe
- 2 a growing operation. But there is going to be
- 3 more diesel-powered equipment in Pennsylvania.
- 4 There may be some things and the Pennsylvania
- 5 Legislation that need adjusted. For instance,
- 6 the ventilation rates that we use for
- 7 Pennsylvania rely on old MSHA regulations.
- 8 But miners in Pennsylvania when diesel
- 9 equipment is issued are going to be protected.
- 10 Now, Cyprus (phonetic) operates the
- 11 Emerly and Cumberland (phonetic) Mines in
- 12 Pennsylvania. They've indicated to me several
- 13 times, over the that several months that they
- 14 also intend to bring more diesels into their
- 15 operations.
- 16 And there is one other operator that
- 17 I would consider a large operator in
- 18 Pennsylvania. We used to have three, now
- 19 there's only two. But I was told -- I was told
- 20 emphatically that that operator would never
- 21 purchase a DST, and I don't think it had
- 22 anything to do with -- anything more than the

- 1 another coal operator.
- I got just a few other things I'd
- 3 like to run one through. I understand there's
- 4 been some comments made about the -- some
- 5 complaints about the requirement for the diesel
- 6 -- or information you put into the ventilation
- 7 plan, and I think that's absolutely necessary.
- 8 The requirements -- and they didn't -- you
- 9 know, I reviewed those requirements; they
- 10 didn't seem extreme to me. I think that
- 11 clearly, like the respirable dust
- 12 requirements, that we need to be able to track
- 13 that information and track it through the
- 14 ventilation plan. I think that if it's in the
- 15 plan, then everybody should be aware of what
- 16 the requirements are.
- 17 I've also heard that the training
- 18 requirements are too broad. And I'm not sure I
- 19 understand that. In Pennsylvania -- and I
- 20 believe that the Pennsylvania Legislation was
- 21 submitted at an earlier public hearing, maybe a
- 22 couple of them. But in Pennsylvania we got

- 1 operators and mechanics.
- 2 The requirements in this regulation,
- 3 I believe, are, you know, much less strict than
- 4 what we did in Pennsylvania. I think that the
- 5 information -- and there's only about four
- 6 things that they're really required to cover,
- 7 and I think they're all important. I think the
- 8 miners should know what health risk associated
- 9 with exposure to diesel particulate matter
- 10 are. I think that they should be aware of the
- 11 methods that are used in the mine to control
- 12 diesel particulate.
- I think they should know who's
- 14 responsible for maintaining the controls. And
- 15 I think they should be trained on the actions
- 16 that they personally have to take to assure
- 17 that those controls are working.
- In response to -- I think Bob had a
- 19 question that I really wanted to clear up or
- 20 statement that he made. Give he just one
- 21 minute here. Bob, you mentioned for outby
- 22 equipment that the outby ventilation

23 requirements would be taken care of by the

- 1 diesel-safety standards. That is a problem,
- 2 that is a problem. And the reason it's a
- 3 problem is that the ventilation requirements
- 4 for operation of multiple units of
- 5 diesel-powered equipment on working sections
- 6 than in areas where recognized mining equipment
- 7 is being installed and removed. They are
- 8 established in 30 CFR part 75.4.5 G have --
- 9 that's 100 percent, 100 percent, 100 percent
- 10 rule. But unlike those requirements for
- 11 diesel-powered equipment that's operated outby,
- there are no additional requirements requiring
- 13 more air than the amount required for a single
- 14 unit of diesel-powered equipment. On multiple
- 15 pieces of diesel-powered equipment are used
- 16 outby the section loading point. Even though,
- 17 many of the same basic engines are used to
- 18 power both inby and outby diesel-powered
- 19 equipment, the standard makes a distinction and
- 20 requires much less air for the machines
- 21 operated outby.
- 22 And since we are talking about

ventilation in outby equipment, when we look at

1 the diesel particulate index, we see another

- 2 significant weakness in the ventilation
- 3 requirements for diesel-powered equipment. MSHA
- 4 regulations establish approval
- 5 plate-ventilation rates for all diesel engines
- 6 used in underground coal mines. The approval
- 7 plate-ventilation rates are calculated on the
- 8 basis of the quantity of air necessary to
- 9 dilute of the gaseous components of the
- 10 emissions to levels established by the
- 11 regulations. The approval-plate rates do not
- 12 address a pollution of diesel particulate
- 13 matter.
- 14 And as mentioned in the preamble to
- 15 the proposed rule, the particulate guide index
- 16 is a guide for the mining industry to use, to
- 17 compare engines. The particulate index
- 18 provides a comparison based on the quantity of
- 19 air that would be required to dilute the
- 20 particulate emissions to a concentration of
- 21 one milligram per cubic meter.
- Now, I've heard a lot of people say

1 agree. And I don't know that, you know, we are

- 2 in a position to set an a PEL. But I would
- 3 like to believe that if we were going to set a
- 4 PEL right now, right today, that it wouldn't be
- 5 1.0 milligram per cubic meter. I mean, that is
- 6 such a high concentration. And we can do so
- 7 much better. And I think all of the evidence
- 8 -- and Dr. Weeks summarized it in his comments.
- 9 I think all the evidence indicates the
- 10 concentrations that miners are exposed to
- 11 should be much lower, emphatically protected.
- 12 But, anyway, on the particulate index
- does not establish the exposure level. It does
- 14 provide a simply methodology for comparing
- 15 particulate emissions. And if we use the air
- 16 quantity requirements for comparing diesel
- 17 particulate emissions, using those, is a method
- 18 that we can -- that can easily be used by the
- 19 industry to make a comparison of the engine.
- The weakness in the ventilation
- 21 requirements is revealed in the comparative
- 22 approval-plate ventilation rates with the

- 1 requirements, in 75325, only make ventilation
- 2 requirements fixed by the approval-plate
- 3 ventilation rate. In many cases, the
- 4 particulate index indicates the quantities two
- 5 to three times higher than necessary to just
- 6 dilute the particulate down to one milligram.
- 7 Without particulate filters, this can
- 8 cause a situation where miners are exposed to
- 9 very high concentrations to diesel particulate.
- 10 This problem is compounded, when we consider
- 11 that the ventilation regulations for multiple
- 12 units of light-duty diesel-powered equipment
- 13 that are operated outby the working section,
- 14 only require the approval-plate ventilation
- 15 rate of one unit to be provided. To just of
- 16 kind of give you an example, if we were to use
- 17 example of two light duties tractors -- and
- 18 light duty only by MSHA definition in the Cat
- 19 3306 -- the ventilation regulations, if those
- 20 two pieces of equipment where operated in the
- 21 same entry, in the same split of air, the
- 22 ventilation requirement would be 7500 CFM,

- 1 the particulate index is 23,000 CFM for a Cat
- 2 3306 150-horsepower diesel engine. These got
- 3 particulate index, just to get to 1.0 milligram,
- 4 would require 46,000 CFM of air. And that's
- 5 pretty huge difference. And, you know, I think
- 6 that even if the equipment isn't operated eight
- 7 hours a day or eight hours a shift, that the
- 8 levels are so high, and the ventilation
- 9 requirements are so low, that we are not even
- 10 coming close to protecting miners.
- 11 Another thing I'd like to encourage
- 12 the Panel to look at is an on-board engine
- 13 performance and diagnostic system. I don't
- 14 think this is a high-cost item, but I think it
- 15 does -- particularly where we are requiring
- 16 filters, I think it does pay some benefits.
- 17 You know most miners are not diesel-engine
- 18 mechanics. They don't have the tools to
- 19 analyze diesel engine's performance, but you
- 20 give them a couple of simple tools in their
- 21 cab, they can tell a lot about the operation or
- 22 how the engine's operating.

- 1 some gauges that are routinely provided.
- 2 Excuse me. They need to be able to determine
- 3 the engine speed, naturally, and the operating
- 4 hours. But when we start looking at things
- 5 like total intake and restriction and total
- 6 exhaust-back pressure, the exhaust/gas
- 7 temperature, engine oil pressure, temperature
- 8 -- engine oil temperature, I think that, you
- 9 know, for a miner that, you know, that can see
- 10 a red line -- and these are any gauges that I'm
- 11 speaking of, like what you have in your
- 12 automobile.
- 13 But if he can see when that thing is
- 14 going out of range, it tells him that he needs
- 15 to seek out a maintenance person, and he needs
- 16 to have the system checked out.
- Now, if the intake restriction is too
- 18 great, we are going to have a fuel situation,
- 19 and we are going to increase the particulate.
- 20 If the back pressure is too great -- actually,
- 21 I think the operators would like to hear this
- 22 -- but a back-pressure gauge would tell them --

1 back pressure gets so great that it actually

- 2 damages the engine.
- 3 But I honestly think that the
- 4 on-board engine performance diagnostic system
- 5 is relatively simple. A thing that we can put
- 6 on diesel equipment that it will help provide
- 7 some protection to miners.
- I think that pretty much -- well,
- 9 actually, there are just a couple of things.
- 10 I'd like to say for the record that this is a
- 11 legal proceeding under the Mine Act and that
- 12 all miners that are here, have a legal right
- and, as a matter of fact, a protected right to
- 14 come here and offer comments. We've had
- 15 several do that. But I would like to caution
- 16 anybody, because we have had some situations
- 17 where miners have been retaliated against for
- 18 offering testimony at different proceedings.
- 19 But I would like to caution everyone that this
- 20 is a protected activity, and section 105 C of
- 21 the Mine Act protects miners of such
- 22 retaliation.

- 1 MR. THOMAS TOMB: Thank you Mr.
- 2 Duncan. Questions? I guess there are no
- 3 question. Thank you very much.
- 4 MR. JEFFREY DUNCAN: Thank you.
- 5 MR. THOMAS TOMB: Is there anybody
- 6 else in the audience that would like to take
- 7 this opportunity before we close the meeting to
- 8 make a statement or presentation?
- 9 MR. WILLIAM SAWYER: If you allow me,
- 10 sir, one more chance. It's like everything
- 11 else, when you sit here and listen, some things
- 12 come back to you. I'm William Sawyer, local
- 13 1926. I'd like to apologize to Dr. Cantrell
- 14 for not recognizing him. I believe he's played
- 15 a big part in getting our regs set up for our
- 16 diesels now.
- 17 MR. THOMAS TOMB: When you mentioned
- 18 his name, he slumped down in the chair there.
- 19 MR. WILLIAM SAWYER: Second, I've
- 20 also noticed a change of heart in Dr. Thakur.
- 21 I believe it was in '95, that he did not have
- 22 any confidence in the dry-bed system and now I

23 hear him promoting catalytic converts, so

- 1 that's a plus.
- 2 Also in that hearing up there, there
- 3 was a brother from Canada that questioned a
- 4 member of the Panel that was a representative
- of Mr. McAteer and the Canadians keep a record
- 6 of their coal miners. If they died during
- 7 their work years or after their work years,
- 8 they know what caused.
- 9 It came up about workman's comp, our
- 10 miners in Alabama -- and this is not offensive,
- 11 but we were ignorant to the fact of the results
- 12 of diesel until all of these tests started
- 13 coming out. So, naturally, we wouldn't go
- 14 report sick if we came down with some kind of
- 15 -- like me, I've got bronchitis continuously.
- 16 I have acute bronchitis occasionally, and I
- 17 also have bronchial asthma that I used to
- 18 didn't have. Okay. And I've got a stack of
- 19 medical records on it this think (indicating)
- 20 but I'm unique situation. I've been exposed to
- 21 three things that causes this and nobody knows
- 22 what caused it is. Is there any plans of that

- 1 cancer deaths, which I believe we have
- 2 different type cancers, that we would have a
- 3 record of peopling passing away with cancer.
- 4 You know lung cancer is the main issue that
- 5 I've heard today, but there is also, I believe,
- 6 two other type of cancer that are linked to the
- 7 results of diesel particulate. I think kidney
- 8 is one and there's another one.
- 9 So, is there any plans for that?
- 10 Another question, and I'm sorry, but these
- 11 things are coming. I asked some of these
- 12 questions in '94, '95, and I'm still without
- 13 answer, or even to take into consideration.
- 14 Another thing I happen to hear: the
- 15 burning eyes, the irritated throat, the
- 16 irritated lungs, but I haven't heard sleepiness
- or becoming sleepy while you're operating
- 18 these diesels. And it is a fact -- and if my
- 19 brothers could testify again, they would say
- 20 sleepiness is one of the major things while
- 21 you're running diesel equipment. We have no
- 22 record of miners that have had wrecks after

1 records of miners falling asleep operating this

- 2 equipment.
- The fifth thing is training. Now, I
- 4 happen to participate in the training under the
- 5 regs for diesel now. And I know what I'm
- 6 suppose to check, as to what the regs require,
- 7 but, as brother Jeff said, I don't believe it's
- 8 sufficient. The main concern we are looking at
- 9 to see if that equipment engine is getting into
- 10 a danger state. And it's being done, but as
- 11 far as the diesel particulate, the smoke is
- 12 there. The diesel smoke is there. And when it
- 13 gets to a point where people complain about it,
- 14 that's when it becomes an issue. But is our
- 15 training adequate, as to our regs?
- 16 The last thing I would ask that I
- 17 told you -- you know, y'all are the Panel and
- 18 y'all are listening to the testimony, and I
- 19 would ask that y'all do an adequate job, not
- 20 that you're not. But I've been asking were the
- 21 Federal Government -- and I recall your
- 22 recollection back to '68, '69, '70, '71, and

- 1 it, but at the time it was a good thing.
- 2 Second, there was a more common thing
- 3 Rock Loc (phonetic), which was a good thing,
- 4 but then after it was a good thing, peoples'
- 5 health started getting involved.
- Diesel, diesels are good, but they
- 7 have to be to where they're not a hazard to the
- 8 miners. We put diesels in the mines without
- 9 thorough investigation, research, and test of
- 10 this equipment. We are far above where we
- 11 were, but are we far enough.
- I asked a question in '94 and '95
- 13 from an environmental man that was concerned
- 14 about the mines -- and I've heard it asked
- 15 today -- When you get this diesel equipment at
- 16 95 percent diesel particulate free, and that
- 17 five percent that's still out there, how long
- 18 does it take for that to hurt a man? I don't
- 19 think there's an answer to that, are there?
- So, consider all things, and make our
- 21 mines a safe place for our brother and sisters
- 22 to work. As I stated up there in that hearing

- 1 enter the field of labor. At that time, I
- 2 would not have had him go into mining because
- 3 of all of the hazard. Diesel is a hazard. The
- 4 test show that diesel can cause human harm.
- 5 Please research, and when you come up
- 6 with findings on these rules, have diesel to
- 7 where I it is a safe piece of equipment that
- 8 can run in our mines and not damage our
- 9 health.
- 10 I thank you.
- 11 MR. THOMAS TOMB: Would you like to
- 12 answer his questions?
- 13 MR. WILLIAM McKINNEY: Chances are
- 14 your sleepiness is caused by carbon monoxide.
- MR. THOMAS TOMB: I didn't quite
- 16 understand what you were -- I thought it was a
- 17 question about other cancers besides lung
- 18 cancer.
- MR. WILLIAM SAWYER: Well, back then
- 20 NIOSH had a study of diesels that were kind of
- 21 being ignored that the did a study, I believe,
- 22 back in the late '60s or in the '70s. There

- 1 to do their own studies, and rightfully so,
- 2 because I've worked under NIOSH law, too. Were
- 3 they not -- I may be wrong, but if I'm not far
- 4 off, there were different types of cancer
- 5 associated -- or risk of cancers associated
- 6 with diesel particulate.
- 7 MR. THOMAS TOMB: Well, there are --
- 8 is the question whether there were different
- 9 types of cancer?
- 10 MR. WILLIAM SAWYER: Apart from --
- 11 MR. THOMAS TOMB: There has been some
- 12 -- I'd say, the way that the risk assessment
- 13 that we published characterizes is that it's
- 14 not conclusive evidence. There has been some
- 15 association and some studies of exposure to
- 16 diesel emissions with bladder cancer, but the
- 17 conclusion of the risk assessment was that that
- 18 evidence was not strong enough to led you us to
- 19 identify bladder cancer as something caused by
- 20 exposure to diesel particulate.
- 21 MR. WILLIAM SAWYER: What I was
- 22 talking about, they did their studies on like

23 diesel mechanic workshops outside. It had to

1 do with all -- you know in bus terminals, where

- 2 they did the studies on the bus and all. But I
- 3 remembered that there was more than just lung
- 4 cancer that were mentioned in that study.
- 5 MR. THOMAS TOMB: Right. There have
- 6 been -- in many of the studies that have been
- 7 carried out, the authors of the studies have
- 8 looked a variety of different effects, not just
- 9 lung cancer, but other forms of cancer and
- 10 other conditions that might be developed, and
- 11 those are addressed in the risk assessment, but
- 12 the attentive conclusion that MSHA came to,
- 13 after reviewing all of these studies, was that
- 14 the only form of cancer for which there is
- 15 strong evidence that there's an association
- 16 with that is caused by exposure to diesel
- 17 emissions is lung cancer.
- Now, it might be that there is an
- 19 effect on other forms of cancer, also, but
- there isn't strong evidence showing that.
- 21 MR. WILLIAM SAWYER: Substantial
- 22 evidence showing that?

- 1 MR. WILLIAM SAWYER: See, as a rep
- 2 for miners that concerns me, because in '94,
- 3 '95. They didn't want to take the rat test to
- 4 go by for what it would cause on humans. And
- 5 y'all may remember the statement. I believe,
- 6 weren't you on the Panel up at Beckley?
- 7 MR. THOMAS TOMB: Yes.
- 8 MR. WILLIAM SAWYER: And I said,
- 9 Let's don't throw our rats away, because the
- 10 whole human system is based on the studies on
- 11 rats. But that -- I'm sorry if I was wrong,
- 12 but I knew there was month cancers mentioned in
- 13 that study and that was seven years ago, five
- 14 years ago. And I knew there was more cancer
- 15 study, and all I heard today was lung, which I
- 16 haven't read any of the studies since then, so
- 17 I thank you for your clarification.
- 18 MR. THOMAS TOMB: A couple of
- 19 comments with respect to questions or comments
- 20 you made. I think there is a cancer registry
- 21 in this Country that tracks all people that get
- 22 cancer and gets information with occupation and

23 things like that. So, there is there a cancer

- 1 registry for that.
- 2 Also one point is concerning your
- 3 effect of the five percent diesel that's left.
- 4 I think it's important to realize -- and this
- 5 is in the preamble -- that this rule is a
- 6 feasibility rule. And we are trying to get the
- 7 occupational exposure of miners down to where
- 8 other occupational exposures are. And this
- 9 rule in no way is intended to get rid of all
- 10 diesel particulate in the mining environment.
- 11 So, I stress that this is a feasibility rule,
- 12 what we are attempting here.
- 13 MR. WILLIAM SAWYER: I also
- 14 understand when you get to the five percent
- 15 ventilation and do a lot more damage to it than
- it can at the 35, 40 percent. You've got less
- 17 you have to worry about. I was wondering, we
- 18 don't have results of what that five would
- 19 cause over a long time of periods, whether it
- 20 causes anything or not.
- 21 MR. THOMAS TOMB: Well, you have
- 22 range of risk assessment out there and somebody

- 1 is an exorbitantly high risk factor that's
- 2 being thrown around here. But we don't know
- 3 what that is, but again the point is: This is
- 4 a feasibility rule.
- 5 And I didn't understand one point
- 6 that you were trying to make relative to, is
- 7 the training adequate? I'm not sure I
- 8 understood what you were trying to say.
- 9 MR. WILLIAM SAWYER: Okay. On that
- 10 -- I do the outby training under the '97 regs
- 11 on the light duty and the heavy duty. And the
- 12 training for that -- and like I say, we did
- install a catalytic converter on one of our
- 14 diesels to see what it would do. And it
- improved, as far as the smoke, but still we
- 16 don't know what kind of particulates are coming
- 17 out. As our electricians -- and what I
- 18 understood that you don't get certified to do
- 19 what's under the regs, you become qualified
- 20 with adequate training. And we not have
- 21 certified diesel mechanics underground. Now,
- 22 we're a little better than our brother at Jim

23 Walter because we have an underground motor pit

- 1 that has electricians that pulls this equipment
- 2 in weekly and checks it, as to what the regs of
- 3 '97 require.
- 4 They have to send it outside, but
- 5 for diesel mechanic work on that engine, other
- 6 than -- and this is even on our sections other
- 7 than changing heads out, setting the latches to
- 8 valves. You can change the injector pump out,
- 9 but you can't go in and adjust that pump,
- 10 because it's preadjusted and got a lid seal on
- 11 it. The only thin you have to worry about is
- 12 the timing. You have to depend on whoever
- 13 sends that injection out, that it's right. in
- 14 As brother Jeff said, when they come
- 15 up on this condition they don't know. The only
- 16 thing that the miners know is when it starts
- 17 irritating them, in whatever way, in their
- 18 eyes, their throat, whatever, or if the smoke
- 19 gets so bad that they can't stand it.
- 20 MR. THOMAS TOMB: But I still don't
- 21 understand your point about training. Are you
- 22 saying miners should be trained on how to fix

23 the engine?

- 1 MR. WILLIAM SAWYER: No, because
- 2 that's diesel mechanics.
- 3 MR. THOMAS TOMB: Right. Okay.
- 4 MR. WILLIAM SAWYER: I understand it
- 5 goes outside to be rebuilt, but as far as the
- 6 training on what -- and all the electrician
- 7 does is the mechanic work, too, in our mines,
- 8 other than going into the internal part of the
- 9 engine. They understand that when they're
- 10 taught that 2,500 parts per minute is the limit
- 11 you pull the engine out of service. They
- 12 understand that if this engine starts changing
- 13 weekly, that it's time to call somebody's
- 14 attention, because something is going wrong in
- 15 it. They understand that if the intake air
- 16 indicator starts loading up, that the engine is
- 17 not getting sufficient air. But, as far as
- 18 going into the training, of what's coming up in
- 19 if '99 regs, I don't believe there's training
- 20 in that. As far as the amounts of air the
- 21 engine has not got to have and everything to do
- 22 with keeping this engine in as good

- 1 MR. THOMAS TOMB: You mean in our
- 2 regulation, is that what you're talking about?
- 3 Or are you saying that should be in there is
- 4 that what you think?
- 5 MR. WILLIAM SAWYER: For the people
- 6 that works ON it.
- 7 MR. THOMAS TOMB: Oh, for maintenance
- 8 personnel. Is there any other questions?
- 9 MR. GEORGE SASEEN: You said you put
- 10 Tally (phonetic) converter on an engine. What
- 11 kind of vehicle was it?
- 12 MR. WILLIAM SAWYER: Jeffrey, it was
- 13 a Jeffrey motor in it.
- MR. GEORGE SASEEN: Ramcar?
- MR. WILLIAM SAWYER: No. It was a
- 16 diesel motor, locomotive for the northern
- 17 miners, locomotives.
- 18 MR. THOMAS TOMB: Any other
- 19 questions. We answered your questions
- 20 hopefully a little bit.
- 21 MR. WILLIAM SAWYER: Yes, sir.
- 22 MR. THOMAS TOMB: Okay. Thank you,

23 very much.

- 1 MR. WILLIAM SAWYER: Thank you.
- 2 MR. THOMAS TOMB: Thank you. One
- 3 more time. Yes.
- 4 MR. JIM BRACKNER: Mr. Chairman, I'm
- 5 Jim Brackner, local 2245. And I also brought
- 6 copies of some ventilation of citations, and
- 7 also citations where we were cited for
- 8 equipment -- diesel equipment not being
- 9 maintained and in safe operating condition. I
- 10 would like to enter these into the record.
- 11 MR. THOMAS TOMB: Okay. Going
- 12 twice? Yes.
- 13 MR. GLENN PIERSON: One more question
- 14 for me. Glenn Pierson, local 1928. I was just
- 15 curious -- I don't know if I read it, heard it,
- 16 or assumed it, but in the intake side of -- air
- 17 intake on the diesel equipment, if methane is
- 18 present in atmosphere, in the mine atmosphere,
- 19 which is it is in our mines. Does that not
- 20 make the engine run richer and the particulate
- 21 level even higher than normally as it be tested
- 22 in a laboratory environment?

1 permissibility engines with 1 percent methane

- 2 in the laboratory. So, when you see
- 3 ventilation rate on the plate in the
- 4 particulate index, that is account for -- that
- 5 number raised with that engine running with one
- 6 percent methane in the intake of engine, so we
- 7 account for that.
- 8 MR. GLENN PIERSON: Thank you.
- 9 MR. THOMAS TOMB: Three times?
- 10 MR. JEFFREY DUNCAN: Just one
- 11 verification.
- MR. THOMAS TOMB: Okay.
- 13 MR. JEFFREY DUNCAN: He is only
- 14 testing the permissible engines.
- MR. GEORGE SASEEN: That's right.
- MR. JEFFREY DUNCAN: Now, as a matter
- 17 of fact -- and I'm going to make an assumption
- 18 that here in Alabama, we've got some of the
- 19 hottest, most gaseous mines in the country that
- in some of those outby areas, we're operating
- 21 nonpermissible equipment, where there is
- 22 methane gas present.

- 1 Virginia and some other places where we've got
- 2 a lot of methane. Now, you are not testing --
- 3 you're approval testing for gassy emissions
- 4 does not include methane for permissible
- 5 equipment. Correct?
- 6 MR. GEORGE SASEEN: We approve the
- 7 engines to the engine manufacture either as
- 8 category A, which is for use in permissible
- 9 vehicles where permissible vehicles are
- 10 required. And category B, where nonpermissible
- 11 -- or where nonpermissible -- or -- yeah,
- 12 nonpermissible electrical equipment is
- 13 required. So, the approval -- the usage comes
- down to the district, it's enforcement on
- 15 whether that equipment is allowed. But the
- 16 nonpermissible is not tested --
- 17 MR. JEFFREY DUNCAN: And -- and we can
- 18 operate nonpermissible equipment in areas where
- 19 there are smaller amounts of methane present --
- and it happens.
- MR. GEORGE SASEEN: That's an
- 22 unfortunate assure.

- 1 places, you know, we may occasionally see, you
- 2 know, 8- or 9-tenths, which is very close to
- 3 the level where nonpermissible equipment, you
- 4 know, would not be allowed to operate. But --
- 5 or for a National level for methane, I should
- 6 say, whether it's permissible is not, but
- 7 that's not factored into the approval and
- 8 that's the point I wanted to make sure we were
- 9 clear on. That's not factored into the
- 10 approval of nonpermissible equipment.
- 11 MR. GEORGE SASEEN: That's correct.
- 12 And methane will have an effect on engines out
- 13 of emissions -- it acts as additional fuel.
- MR. JEFFREY DUNCAN: The one that I
- 15 think is most best example is the Isuzu 2D 100.
- 16 Nonpermissible application, I believe the
- 17 particulate index is 8,500 CFM. And the
- 18 permissible application is 50,000. Is that
- 19 correct?
- MR. GEORGE SASEEN: That's the PI.
- 21 MR. JEFFREY DUNCAN: Yeah, that's
- 22 what I said.

- 1 MR. JEFFREY DUNCAN: That's with only
- 2 one percent of methane difference. Right?
- 3 MR. GEORGE SASEEN: And what's varied
- 4 in that is -- back that engine off a couple
- 5 percent on power and that PI is down to about
- 6 10,000.
- 7 MR. JEFFREY SASEEN: As a matter of
- 8 fact, it's -- that's -- at the approval --
- 9 MR. GEORGE SASEEN: Yes --
- 10 MR. JEFFREY DUNCAN: Set up -- set up
- 11 as approval.
- MR. GEORGE SASEEN: Right.
- MR. JEFFREY DUNCAN: Thank you.
- MR. THOMAS TOMB: Thank you, Mr.
- 15 Duncan. Did you have a comment, Bob.
- MR. THOMAS TOMB: I'll start again.
- 17 Would anybody else like to make a comment
- 18 before we close the meeting? Okay.
- I want to thank you all for
- 20 participating and for your interest and for
- 21 taking the time to come here and participate in
- 22 this meeting. We appreciate it, and anybody

1	information to us, I would appreciate it if you	
2	would get it to us as soon as possible.	
3	Absolutely no later February 16th, 1999. And I	
4	want to wish you all a safe trip back and have	
5	a nice Christmas.	
6	Thank you.	
7		
8		
9		
10	(This public hearing for the proposed	
11	rule: Diesel Particulate Matter Exposure	
12	of underground Coal Miners, was concluded,	
13	at approximately 2:45, Thursday,	
14	December 17, 1998.)	
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22		

1	REPORTER'S CERTIFICATE		
2			
3	DOCKET NO.:	N/A	
4	CASE TITLE:	Diesel Particulate Matter Exposure	
5	HEARING DATE:	December 17, 1998	
6	LOCATION:	Birmingham, Alabama	
7			
8	I hereby	certify that the proceedings and evidence are	
9	contained fully and accurately on the tapes and notes		
10	reported by me at the hearing in the above case before the		
11	United States Department of Labor.		
12			
13			
14		Date: December 17, 1998	
15			
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